Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 7/01): 43,993 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$38.5-54.0 per MWh, Ave. = \$42.9

Approximate change from previous week
 "Normal" price range, before 5/00
 \$\frac{4}{5}\$ per MWh
 \$\frac{20}{5}\$ 40 per MWh

Petroleum, West Texas Intermediate: \$30.17 per barrel (year ago: \$24.47)
Seattle gasoline price (6/30)
\$1.61 per gallon (year ago \$1.51)

• Natural gas, Sumas Hub: \$4.78 per million British Thermal Units (year ago \$2.75)

• Approximate change from last week. Oil: +1.0 per barrel; Nat. gas: +0.22 MMBtu

3. California Electricity Situation

- CA ISO Alert Status
 - o A stage 1 alert (7% reserve margin) was declared on May 28, 2003.
 - o A stage 2 alert (5% reserve margin) was declared on July 10, 2002.
 - o Most recent rotating blackouts: Tuesday, May 8, 2001
- Energy News Headlines from California and the Nation
 - o Canada is losing ability to fulfill US gas needs (New York Times, June 25)
 - o In natural gases future, experts see more high prices and growing imports (The New York Times, June 27)
 - o FERC targeting 60 power sellers (Sacramento Bee, June 26)

4. River and Snowpack Information (Updated June 30, 2003)

- Observed May stream flow at The Dalles: 78.4% of average
- Observed May precipitation above the Dalles: 85% of average
- Observed 2003 snow pack as of May 7: 89% of average
- The latest forecast of Columbia River stream flows this January through July is 89.3 million acre feet, 83 percent of normal: National Weather Service Northwest River Forecast Center.

5. Energy Conservation Achievement (Updated Mar. 10, 2003)

• **State Agencies:** From January to December 2002 electrical usage was 7.6 % less and natural gas usage was 4.1% less compared to the same period in 2000.

6. Winter Load Loss/Reservoir Impacts/Fish (Updated April 21)

- Federal reservoir system storage: 46% full: Precipitation Oct. to date, 93% of normal.
- Estimated winter (2002/03) load loss probability of 1%

7. Power Exchanged: (July 1, 2003)

• Average flow of power during the last 30 days

o California (exported to) 3,591 MW o Canada (exported to) 601 MW o Net power export: 4,192 MW

Canada Is Losing Ability to Fill U.S. Natural Gas Needs

By BERNARD SIMON

For years, Canada has been the safety valve for the United States natural gas market, pumping supplies across the border to ease shortages and keep prices reasonably stable. But the recent surge in gas prices suggests that the days when Americans could look north for relief are over.

Barring a serious slump in the American economy that would significantly reduce demand, industry experts say, the United States will need every cubic foot of Canadian gas it can get, and then some. But Canadian production is, for the moment at least, at its maximum: it will be at least five years before Canada will again be in a position to act as a swing supplier, the experts say.

From now until 2008, "the best the Canadian industry can do would be to keep production flat," said Mark G. Papa, chairman and chief executive of EOG Resources of Houston, one of the few gas producers to increase output from its Canadian wells last year. A fall of 1 to 2 percent over that time is more likely, Mr. Papa said.

Tight gas supplies in the United States pose a threat to economic growth, said Alan Greenspan, chairman of the Federal Reserve, which lowered interest rates today in response to general weakness in the American economy. Mr. Greenspan told the House Energy and Commerce Committee on June 10 that the country could not expect Canada to make up for falling production in the United States, and that new facilities were needed to import liquefied natural gas from Asia, the Middle East and the former Soviet Union.

On Thursday, Spencer Abraham, the secretary of energy, will meet with top government and industry officials and members of Congress to discuss tight natural gas supplies at a conference in Washington organized by the National Petroleum Council, an advisory group that reports to Mr. Abraham.

North American natural gas prices are quoted in dollars per million British thermal units, a measure of raw energy content. On the New York Mercantile Exchange, they peaked at more than \$6.50 earlier this month, up from about \$3.65 a year ago; gas for July delivery traded yesterday at \$5.76. Stored supplies of natural gas are near record lows in the United States, and have also fallen sharply in Canada.

Canada now supplies 16 percent of United States' gas, double its share a decade ago. "The Canadians have come to the rescue on the supply front," said Rhone Resch, vice president for energy marketing at the Natural Gas Supply Association, a producers' trade group in Washington.

But last year, Canadian production fell for the first time since 1986. Thomas R. Driscoll, an analyst at Lehman Brothers in New York, said in a recent report that he expected a further decline of 2 percent to 4 percent for this year.

The problem is that gas reserves in western Canada are being depleted more quickly than readily recoverable new reserves can be found. Martin King, an analyst at FirstEnergy Capital in Calgary, said, "There's a growing realization that there's no good, cheap gas left."

According to a survey of 95 companies by Nickle's Daily Oil Bulletin of Calgary, additions to gas reserves last year, totaling 3.7 trillion cubic feet, were the lowest since 1996, and down 23 percent from the record set in 2001.

The gas industry thought it had a huge new find three years ago with the discovery of the Ladyfern field in British Columbia. But Ladyfern has been a disappointment.

The underground pressure in the field has fallen rapidly, making it more difficult to bring the gas to the surface; also, water has seeped into many wells.

According to Mr. King, output from Ladyfern has fallen by about two-thirds from a peak in mid-2002 and it alone accounts for about half of the overall decline in western Canadian production this year.

There have been other setbacks, too. For example, development of a remote but promising offshore field in Nova Scotia, Deep Panuke, has been delayed.

Recent high gas prices could encourage companies to move into regions like the foothills of the Canadian Rockies, where gas pools are deep, the geology is relatively complex and production costs are correspondingly higher.

According to Mr. King, drilling a single well in the foothills can cost 3 million to 10 million Canadian dollars (\$2.2 million to \$7.4 million), compared with just 150,000 Canadian dollars (\$111,000) for a small, shallow well in southern Alberta.

But Peter Hunt, a spokesman for ConocoPhillips Canada in Calgary, said, "Last time there was a marked increase in exploratory drilling due to higher prices, all that we managed to do was to replace what we were already producing."

Today's supply squeeze has heightened interest in two ambitious long-term projects intended to bring gas from Alaska and the Canadian Arctic to the lower 48 American states. Last week, a consortium led by ImperialOil, Exxon Mobil's Canadian unit, completed a partnership agreement with the aboriginal peoples in the Northwest Territories and with TransCanada PipeLines for a 800-mile pipeline linking new gas fields in the Mackenzie River delta to TransCanada's main network.

This pipeline, expected to cost about \$3 billion, would have a capacity of about 1 billion cubic feet a day, equal to almost 2 percent of American consumption. An even bigger project, reaching gas fields in northern Alaska, would carry 4 billion to 5 billion cubic feet a day; the estimated cost is 20 to 26 billion dollars.

Both projects still face a number of hurdles, including regulatory and environmental approvals, and perhaps Congressional action, as well as financing arrangements. According to industry executives and analysts, the Mackenzie Delta pipeline is unlikely to be completed before 2008, and the Alaska project might follow two to five years later.

Mr. Kvisle of TransCanada said that the prevailing high price for gas "gives producers more incentive than would otherwise be the case" to move ahead with such ambitious projects. But the companies know, he added, "that the price that matters is the price 6 or 20 years in the future."

In Natural Gas's Future, Experts See More High Prices and Growing Imports

By MATTHEW L. WALD

Continued high prices for natural gas will drive some industries offshore and increase gas imports by tanker, according to participants at a meeting the Energy Department convened here today to confront gas shortages.

Energy Secretary Spencer Abraham said prices were so high that some companies using natural gas in manufacturing would find it more profitable to shut down and then sell their gas reserves. He and others predicted higher costs for summer electricity and winter heating.

The country is "running out of gas and balancing the demand by destroying jobs," said William S. Stavropoulos, chairman and chief executive of Dow Chemical, which burns natural gas for heat and uses it as an ingredient in chemical products.

On the other hand, John F. Nunley III, director of the energy office of the State of Wyoming, an oil and gas producer, said it was hard to say now what the supply and demand picture would be next winter. "We must keep in mind that things may work out just fine without action by government," said Mr. Nunley, who is chairman of the National Association of State Energy Officials.

Experts trace the current high prices and low inventories to a small dip in production and increased demand over an unusually cold winter.

Higher gas prices are lifting electricity prices and thus revenue for companies that make electricity from coal or nuclear power. They are also stimulating interest in imports.

Patrick Henry Wood III, chairman of the Federal Energy Regulatory Commission, said that the nation's import capacity is about three billion cubic feet a day, but that companies had filed for permits to increase that to nine billion cubic feet a day by 2007. Fifteen projects under study around the country could increase import capacity to more than 13 billion cubic feet a day by 2009, he said.

"The United States is on its way to becoming part of a global gas market," said Daniel Yergin, an energy expert and adviser to the energy secretary. He painted a picture for natural gas in this decade much like that of oil in the 1970's, when prices rose and stimulated drilling, but domestic supplies were still inadequate and imports had to make up the difference.

Natural gas imports could make up 5 percent of American energy demand by 2020, up from well under 1 percent now, Mr. Yergin said, and would come from a broader range of countries than those that supply oil.

Also, he noted, there is no export cartel for natural gas, as there is for oil.

The technology used to turn natural gas into a liquid has improved, and experts say that the price per million British thermal units needed to justify new investment is in the range of \$3 to \$4.50. Lately the price has hovered around \$6, although few expect it to stay that high.

A million B.T.U.'s is the energy equivalent of about 7.2 gallons of diesel fuel. The most modern gasfired electric plants can make about 140 kilowatt-hours from that amount of gas, which is enough electricity to power a single-family house for three or four days, depending on the climate.

But older plants can produce only about half as much electricity from that amount of gas. If power companies expect high prices to become permanent, they are likely to modernize such plants, which would stretch gas supplies, experts say.

Several participants in the meeting said prices were likely to stay high by historical standards, because the current price squeeze was different from the last crisis. That was in the mid-1970's, when price controls discouraged exploration. When they were lifted, new drilling swelled inventories.

This time, high prices have spurred drilling: there are 915 drilling rigs at work, up about 50 percent over last year. But increases in supplies, when they come, are expected to be modest, because the gas

fields on shore in the lower 48 states, in Canada and in the shallow waters of the Gulf of Mexico, are past their prime, experts say.

Some experts said domestic production could be pushed up sharply if the industry were allowed into the eastern Gulf of Mexico and the Atlantic and Pacific coasts — where drilling has been barred by successive Republican and Democratic administrations — and on public lands.

Some power producers have raised the idea that because natural gas prices are high, the federal government should temporarily relax air pollution rules, allowing more coal and oil to be burned. Coal is burned in specialized plants but some turbines designed for natural gas can burn oil as well.

But E. Linn Draper Jr., chairman and chief executive of American Electric Power, the nation's biggest coal customer, said today that that idea was "premature."

Robert Card, an under secretary of energy, said in an interview that his department would not propose measures that would make air pollution worse, but might endorse them if states raised the issue, as California did during its electricity crisis.

Daniel A. Lashof of the Natural Resources Defense Council told the group that the country should ride out this boom part of the boom-and-bust gas business. "High gas prices inflict harm on people and our economy, but so does pollution," he said.

Outside the meeting, at the Mayflower Hotel, about two dozen protesters from the U.S. Public Interest Research Group carried signs with slogans like "Windmills, not oil wells."

The Energy Department announced today that last week, for the fourth consecutive week, the amount of gas put into storage for winter set a record. The total, though, is still about 19 percent below the five-year average for this time of year.

FERC targeting 60 power sellers

But federal regulators reject the state's request that they order renegotiation of long-term pacts.

By David Whitney June 26

Acting on their March report of "epidemic" manipulation of the California electricity market two years ago, federal power officials Wednesday ordered administrative trials of about 60 power sellers that could be forced to return corporate profits for market gaming.

But the Federal Energy Regulation Commission voted 2-1 to reject California's request that it order renegotiation of long-term power contracts worth about \$12 billion that it entered into during the height of the electricity crisis, on grounds that the state was in essence forced to the table by prices driven up by fraud.

That decision was not a surprise since the commissioners had indicated in March that only William Massey, the panel's lone Democrat, felt the evidence of wrongdoing was so compelling as to overturn contracts the state willingly entered into.

FERC also voted 2-1 against any refunds for the Pacific Northwest arising out of the electricity crisis. That ruling ended California's \$1.5 billion claim for refunds for power purchases from the Bonneville Power Administration, Powerex Corp. and other suppliers, the state said.

Tuesday July 1, 2003

"The commission has completely ignored evidence that manipulation in California greatly impacted the Pacific Northwest," said California Deputy Attorney General Vickie Whitney. "To get nothing is incredulous."

Still pending is a separate California refunds claim, which will probably yield in the neighborhood of \$3 billion. Those refunds did not come up at Wednesday's meeting, and commission chairman Pat Wood said later that it will be months before the calculations will be completed.

The commission also voted unanimously to revoke the authority of Enron Corp. to operate in the deregulated power markets. It was the harshest step the commission is empowered to take.

But the practical consequences of the decision are dubious since the company is in bankruptcy proceedings. Enron has withdrawn from trading but continues to deliver some gas and power to customers under contract.

The commission's refusal to order renegotiation of the long-term contracts affects only about a third of the deals the state signed in early 2001. Eighteen of the 24 contracts already have been renegotiated, significantly lowering the state's costs. The six remaining contracts are worth about \$13 billion.

The commission said it was not in the public interest for the commission to interfere with these contracts. Wood noted published reports in which Davis praised the contracts and David Freeman, who negotiated them, touted them as "fair, negotiated deals."

"I didn't see duress," Wood said.

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Seattle gasoline price (7/8) \$1.64 per gallon (year ago \$1.50)

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- Energy News Headlines from California and the Nation
 - o Project could power 40,000 homes: \$175 million project in the wind (News Tribune, July 1)
 - o 2nd PG&E unit goes under (Sacramento Bee, July 9)
 - o BPA sees adequate hydropower in NW (Reuters, July 8)

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Project could power 40,000 homes: \$175 million plan in the wind AL GIBBS; The News Tribune

KITTITAS COUNTY - Andrew Young stands by a tall tower on Whiskey Dick Mountain, a desolate pile of volcanic rock and soil 3,873 feet above sea level 20 miles or so east of Ellensburg.

It is very early morning. The sun has been up little more than an hour. A rising breeze twirls the blades of anemometers at various altitudes on the tower.

"The winds are waking up," Young says as his grin beams in the morning light.

Welcome to the remote site that Young hopes will become the Wild Horse Wind Power Project, a proposed \$175 million, 165-megawatt wind farm to be developed by Zilkha Renewable Energy. This is the third such project proposed for Kittitas County.

Surrounded by little but basaltic rock, sagebrush and a few towers that dutifully measure the wind, this could be one of the most remote locations in Washington State.

"This site begs for a wind farm," says Young, 35, Zilkha's director of project development. "What else would you do with it?"

The project was scheduled to be formally announced today. The proposal will be filed this week with Washington's Energy Facility Site Evaluation Council.

If permits are granted and construction proceeds as scheduled, the site could be generating electricity by 2005. Energy from the project could light and heat more than 40,000 homes.

Wild Horse is the latest example of Washington's growing use of wind-to-energy projects.

As of this spring, the Northwest Power Planning Council counted about 450 megawatts of new wind farms in the region, said spokesman John Harrison.

"There's a boatload of new construction," he said.

Tacoma Power is one of a few utilities not in the market. It has enough resources to fill demand for five or 10 years.

But FPL Energy is adding to its Stateline project west of Walla Walla. Energy Northwest, the former Washington Public Power Supply System, also will add wind turbines to its Jump Off Joe Butte site near Kennewick.

"Keep an eye on us, because I have a feeling there will be more announcements, and sooner rather than later," said Jan Johnson, a spokeswoman for PacifiCorp Power Marketing. PPM, as it's called, is the Portland-based subsidiary of PacifiCorp, which hopes to have 2,000 megawatts of wind power in the United States by 2010.

PPM sells FPL Energy's wind power to folks like Seattle City Light, Puget Sound Energy and the Bonneville Power Administration, among other utilities.

"Utilities now get it, and the public wants it," Robert Kahn said of wind power's environmental attraction. "They'll pay a little more to get it."

Wednesday July 9, 2003

Kahn, a Mercer Island consultant for Zilkha, has been around what utilities call renewable resources for years.

Wind power typically costs one penny or less for every kilowatt a consumer uses, slightly more than hydropower.

Bonneville first measured the wind on Whiskey Dick Mountain in the 1970s, Kahn said. The site was largely ignored, however, until Zilkha acquired the rights to use it about two years ago.

Zilkha also controls a site at the west end of Kittitas Valley that it intends to develop near a peak called Chinaman's Hat.

There's also enXco, which proposes to build a 225-megawatt wind farm with 150 turbines northwest of Ellensburg.

Although wind is a popular source of electrical energy, that doesn't mean it's universally loved.

Take opponents who oppose Zilkha and enXco projects at the west end of the Kittitas Valley. Zilkha folks call them Microsofties, but they're not all Redmond millionaires.

Steve Osland is a barn builder and horse shoer, a farrier who with his wife, horse trainer Amy Osland, operates out of a small farm in Duvall.

Osland owns 80 acres with views of the Kittitas Valley and Mount Rainier. Although there's no power or water to the site, Osland thinks there could be soon.

"These things are monsters," he said of wind generators. "I'd be looking into nothing but white tubes."

Osland calls the battle to put in the wind farm "a long, ugly, ugly fight." Zilkha developers, he said, "like to call us richies from the Eastside."

But no longer is living there an option for Osland.

"I'm so scared of wind farms, I put our (80-acre) property up for sale.

"I'm not," he adds, "going to be moving there now."

Although Washington is not among the world's - or even the United States' - top wind farm areas, the state's geography provides an example of how they work.

Winds that pour from Western Washington's generally colder climes to the heat of Central Washington roar past Chinaman's Hat, east across the valley, and then across Whiskey Dick Mountain on what was once called Parke Creek Ranch.

They're like a river, said Young, "a river of air."

"The other site at the end of the valley is where the wind speeds up" because of the land's contour, he added.

Whiskey Dick Mountain is in "the known, desolate part of the county," Young said.

Even with sagebrush and a few flowering plants, there's little to recommend the area. Broken basaltic rock from Washington's volcanic past covers the ground, and that's a good thing because it will provide raw materials for the road construction needed to get 200-foot steel towers, giant generators and 100-foot wind blades to the site.

About 85 local jobs will be created during construction, and 10 people will be employed full time after completion.

About \$6.4 million in locally produced construction materials will be purchased, according to an economic report prepared for Zilkha. Another \$900,000 will be spent on food and lodging for workers brought to Kittitas County for the project.

Altogether, the Whiskey Dick project is expected to add around \$12 million to the largely agricultural area's economy. Directly and indirectly, some 185 jobs will be added, and the county can expect to receive more than \$800,000 a year in new property taxes.

Property owners can expect to receive between \$4,000 and \$6,000 a year for each wind tower located on their land, depending on how much power is generated.

Power can be handled by two major transmission lines owned by Bonneville and Puget, one on each side of the project.

Only one major question mark remains.

A federal tax credit of about 1.7 cents per kilowatt-hour of energy generated makes wind farms economically feasible. The current tax expires at the end of this year.

An extension until 2007 is included in the federal energy bill being debated by Congress. And if the tax credit isn't extended, as it has not been - although briefly - in the past?

"We'd carry on," Kahn said. "We wouldn't build without the credit, but we'd carry on."

2nd PG&E unit goes under

National Energy Group's Chapter 11 plan calls for assets to go to creditors.

By Dale Kasler, July 9, 2003

PG&E Corp.'s unregulated energy company filed for bankruptcy protection Tuesday, joining its sister utility in Chapter 11 and ending PG&E's disastrous foray into the free-market energy business.

Two years after PG&E's flagship utility Pacific Gas and Electric Co. filed for bankruptcy protection, the corporation's National Energy Group subsidiary followed suit by filing for Chapter 11 protection in U.S. Bankruptcy Court in Maryland.

That means the two main operating subsidiaries of the parent corporation are in Bankruptcy Court, although the similarities end there. PG&E Corp. is working on a plan to bring Pacific Gas out of bankruptcy protection, while it's giving up on National Energy. The corporation filed a bankruptcy plan that calls for the surrender of National Energy's assets -- a nationwide string of power plants and pipelines -- to its creditors.

"PG&E Corp. has made the decision that this is the point of separation," the corporation's chief financial officer, Peter Darbee, said in a conference call with investors and analysts.

Robert Glynn Jr., PG&E's chairman and chief executive, said the National Energy filing won't affect the parent company or its Pacific Gas utility. But the corporation already has written off billions of dollars invested in National Energy.

With the second bankruptcy protection filing, PG&E effectively has been hammered twice by the California energy crisis -- by the crisis itself and then its stunning aftermath.

The utility got clobbered first. The state's deregulation scheme forced Pacific Gas to sell many of its power plants and buy electricity every day from wholesalers, a plan that turned nightmarish when prices soared in 2000 and 2001. Pacific Gas filed for bankruptcy protection in April 2001.

At the time, the parent company took solace in National Energy, which was formed in 1998. The company was starting to make good money selling power to utilities in other states as deregulation swept the nation.

But prices fell, the energy crisis ended in California and Enron Corp. collapsed in scandal -- drying up credit markets for National Energy and many other deregulated energy sellers. National Energy defaulted on billions in debts and since last year its bankruptcy was inevitable.

PG&E's stock closed unchanged at \$21.90 Tuesday on the New York Stock Exchange.

BPA sees adequate hydro power in U.S. Northwest

Reuters - *July 8, 2003*

Hydro power generation this year in the Pacific Northwest looks set to match the average seen in years past, the region's biggest electricity provider said on Tuesday.

"We don't think there will be any problems meeting our energy needs," said Mike Hansen, a spokesman for Bonneville Power Administration (BPA), the Portland, Oregon-based federal agency that markets energy from the region's giant dams.

Hydro power accounts for about 75 percent of the electricity used in Northwest states like Washington, Oregon and Idaho.

"The region's runoff is lower compared with last year. But the flip side is that demand is down because of the economic downturn and that is making it easier to meet our energy demand," he said.

Hansen said water conditions in the region averaged about 105 million acre feet per year over the past 30 years, generating some 7,000 megawatts a year.

This year the region is likely to end the so-called hydro season this month at around 90 million acre feet of water, below last year's 103 million acre feet but well above the 58 million acre feet seen in 2001, when the region was hit by its worst drought in 50 years.

In mid-June, BPA said improved Northwest hydro conditions played a role behind a drop in a proposed rate increase it initially announced in February due in part to the agency's poor fiscal outlook.

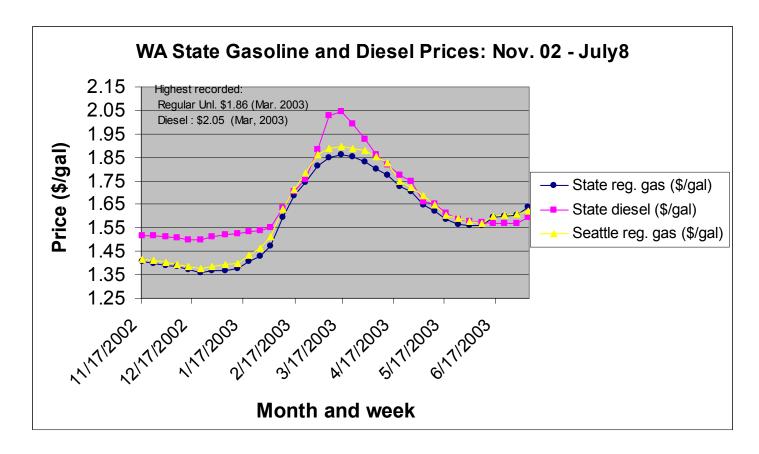
BPA said wholesale power rates it charges its utility-based customers could rise by about 5 percent from current rates over the next three years instead of the 15 percent announced in February.

The rate increase, if approved by the Federal Energy Regulation Commission, would take hold Oct. 1. Rates are reviewed every six months to take into account changes in market conditions, such as hydro electric output.

New power supplies have also added to the Northwest's relatively stable power supplies.

In January, the Northwest Power Planning Council said the region had added about 3,200 megawatts of new generation since January 2000 when power prices rose sharply amid California's energy problems and the region's drought shortly after.

Fuel prices increased approx. 8 cents per gallon during the last 5 weeks.



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- Energy News Headlines from California and the Nation
 - o Looming natural gas crunch threatens economy (PR Newswire, July 14)
 - Weekly gas prices rise (New York Times, July 15)

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Looming Natural Gas Crunch Threatens Economy

PR Newswire - July 14, 2003

The U.S. will face a natural gas supply shortage of major proportions this winter, with skyrocketing consumer prices and other economic damage as an inevitable result.

This is the picture based on objective data measuring natural gas supply and demand and presented by leading energy industry experts who will confer in Washington next month to analyze the issue and seek solutions.

These experts, meeting Aug. 18-19 at George Washington University (for "The Natural Gas Emergency 2003" conference), include representatives from the Federal Energy Regulatory Commission (FERC), the National Association of Regulatory Utility Commissioners (NARUC), and the Federal Reserve Bank of Dallas.

The fast-approaching natural gas crunch follows a decade's worth of serious imbalance in the nation's supply/demand equation, according to these and other experts.

Natural gas has long been the fuel of choice for residential users, and demand for natural gas accelerated sharply in the 1990s. However, at the same time, many electric utilities shifted to the clean-burning fuel in order to meet tighter pollution control rules enacted by Congress. But the huge jump in natural gas consumption did not bring an accompanying increase in natural gas production, the experts say.

Now, after a decade of this pattern, the inevitable has arrived: the demand for natural gas has begun to overwhelm supply.

The big crunch, the experts say, will come this winter -- in the form of soaring prices American consumers will have to pay to heat their homes.

The economic impact of a major supply crunch could extend far beyond the shock to consumers' pocketbooks. Already, some industrial users of natural gas are closing factories or moving abroad as a result of fuel shortages and higher prices.

"A doubling of natural gas prices, which is what we've seen," could reduce the gross domestic product by more than two percent, according to Stephen Brown, director of energy economics at the Federal Reserve Bank of Dallas.

Brown will be a featured speaker at the conference, hosted by the King Publishing Group.

Other conference presenters will include Bill Hederman, director of FERC's Office of Market Oversight & Investigations; Don Mason, vice chairman of NARUC's Natural Gas Committee, and member of the Ohio Public Utilities Commission; and representatives of leading energy companies.

King Publishing Group, publisher of The Energy Daily, timed the conference to see what effect summer usage has had on natural gas supplies; to forecast when a consumer supply crunch would be most likely to hit; and to consider what remedial actions the nation should take.

Weekly Gas Price Rose to \$1.52 / Gallon - EIA

New York Times, By REUTERS

WASHINGTON (Reuters) - U.S. retail gasoline prices posted their biggest one-week gain since early February, led by a surge in the U.S. Gulf Coast where the cost per gallon rose an average 4.6 cents per gallon, the government said on Monday.

The average U.S. pump price, based on a weekly survey of more than 800 service stations by the Energy Information Administration, rose to \$1.521 per gallon, an increase of 3.2 cents from a week ago.

It was the biggest one-week jump since prices rose 5.3 cents to an average \$1.660 per gallon in the Feb. 10 week, nearly a month before the U.S.-led attack on Iraq.

The average cost per gallon was 12.7 cents a gallon above the same week one year ago, according to the EIA.

Crude oil costs account for about 40 percent of the price of gasoline.

Last week's gasoline price boost was led by the U.S. Gulf Coast region, which remained the least costly to fuel up even as the average cost at the pump rose 4.6 cents to \$1.434 per gallon, the EIA said.

In the Midwest and East Coast, prices jumped 4.5 cents to \$1.495 and \$1.491 per gallon respectively.

Drivers on the West Coast paid the most to fill their tanks even as prices dipped 2.3 cents to \$1.714, the only drop among the five major regions surveyed by the EIA.

Among the major cities highlighted by the EIA, Houston pump prices were the cheapest at \$1.403 per gallon, up 4.2 cents. San Francisco remained the most expensive city as prices fell 3.4 cents to an average \$1.873 per gallon.

The national price for cleaner-burning reformulated gasoline, sold at about one-third of the gas stations in cities and smoggier areas, rose 2.0 cents to \$1.584 a gallon.

U.S. diesel prices increased 0.7 cent to an average \$1.435 per gallon last week, the EIA said. The average cost for a gallon of diesel is 13.5 cents per gallon more expensive than one year ago, according to EIA data.

Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 7/21): 49,473 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$42.5-63.5 per MWh, Ave. = \$51

Approximate change from previous week
"Normal" price range, before 5/00
\$48 per MWh
\$20-\$40 per MWh

Petroleum, West Texas Intermediate: \$31.78 per barrel (year ago: \$27.48)
Seattle gasoline price (7/15)
\$1.63 per gallon (year ago \$1.50)

• Natural gas, Sumas Hub: \$4.35 per million British Thermal Units (year ago \$2.75)

• Approximate change from last week. Oil: +0.51 per barrel; Nat. gas: -0.15 MMBtu

3. California Electricity Situation

- CA ISO Alert Status
 - o A stage 1 alert (7% reserve margin) was declared on May 28, 2003.
 - o A stage 2 alert (5% reserve margin) was declared on July 10, 2002.
 - o Most recent rotating blackouts: Tuesday, May 8, 2001
- Energy News Headlines from California and the Nation
 - o Energy firms see hot market for super cold natural gas (Wall Street Journal, July 17)
 - o BPA's risk of default grows GAO says (Tri-City Herald, July 18)
 - o Hydrogen cars not needed experts say (Reuters, July 21)

4. River and Snowpack Information (Updated July12, 2003)

- Observed June stream flow at The Dalles: 87.2% of average
- Observed June precipitation above the Dalles: 50% of average
- Observed 2003 snow pack as of May 30 (final for 2003): 89% of average
- The latest forecast of Columbia River stream flows this January through July is 89.3 million acre feet, 83 percent of normal: National Weather Service Northwest River Forecast Center.

5. Energy Conservation Achievement (Updated Mar. 10, 2003)

• **State Agencies:** From January to December 2002 electrical usage was 7.6 % less and natural gas usage was 4.1% less compared to the same period in 2000.

6. Winter Load Loss/Reservoir Impacts/Fish (Updated April 21)

- Federal reservoir system storage: 46% full: Precipitation Oct. to date, 93% of normal.
- Estimated winter (2002/03) load loss probability of 1%

7. Power Exchanged: (July 22, 2003)

• Average flow of power during the last 30 days

o California (exported to) 2,985 MW o Canada (imported from) 111 MW o Net power export: 2,874 MW

Energy Firms See Hot Market For Supercold Natural Gas

At 260 Degrees Below Zero, the Fuel Becomes a Liquid as Portable as Oil

Last summer, the docks in Brunei got a visit from a freezer the size of an aircraft carrier.

The holds of the Aries were lined with three feet of insulation: first, a layer of containers filled with perlite -- a lightweight rock often used in potting soil to retain moisture -- then a layer of polyurethane foam, best known as a cushioning in upholstered furniture.

All that padding was designed to keep the Aries's cargo at minus 260 degrees Fahrenheit. Inside was natural gas, frozen into liquid form.

This frosty fuel is poised for a boom that could transform the world's energy markets. Ordinarily, to ship natural gas, you need to build a pipeline from the producer to the purchaser. With liquefied natural gas, or LNG, the fuel can be shipped anywhere, as easily as oil. The LNG on the Aries, for example, ended up halfway around the world in Louisiana.

Oil is getting more expensive to produce, and many energy companies are sitting on vast, untapped deposits of natural gas. LNG offers the companies an easy way to ship that fuel around the globe, creating an international market for a commodity that has never had one before and potentially lowering sky-high prices for natural gas in the U.S. Even Federal Reserve Chairman Alan Greenspan told Congress recently that the nation needed to be doing more to bring in LNG.

Energy giants **BP** PLC, **Exxon Mobil** Corp. and **Royal Dutch/Shell** Group, which chartered the Aries, are all investing billions of dollars in plants to produce LNG and ships to transport it. All that construction is creating economies of scale that are driving down the cost of producing and shipping the fuel, making it even more attractive to producers.

"We have a significant amount of gas resources and markets that look like they need gas," says Peter J. Robertson, vice chairman of **ChevronTexaco** Corp., which plans to spend billions on special LNG receiving terminals off the coasts of Texas and California. "As you look into the future, [LNG] will be a bigger and bigger part of the world energy supply."

Already, the U.S. is seeing an LNG boom. In 2002, ships offloaded 229 billion cubic feet of LNG into the country, up nearly 170% from 86 billion cubic feet in 1998. Just the first three months of this year saw 80 billion cubic feet in imports, according to the U.S. Energy Department. Imports are projected to grow to 900 billion cubic feet by 2005, supplying 4% of U.S. natural-gas demand.

Energy companies have known how to make LNG for years, but there wasn't enough interest in the fuel to mass-produce it and thus achieve economies of scale. For the most part, the only buyers were Japan and Korea, which don't have large local supplies of natural gas.

Now several forces have come together to make LNG a more profitable proposition for energy companies. Over the past few years, natural gas rapidly has become the fuel of choice for power plants and many industries in the U.S. Companies were drawn to natural gas by its low cost and its environmental friendliness. Congress has pushed the power-generation industry to use gas. But lately supplies of the fuel have flattened in North America, forcing prices to roughly twice their traditional level: about \$5 per million British thermal units, compared with the usual \$2.50 or so.

To feed its need for natural gas, the U.S. has few options besides LNG. The U.S. has been importing natural gas through pipelines from Canada, but growing demand north of the border makes increased exports unlikely. A new pipeline to Alaska would ease supply problems, but that would take the better part of a decade to build.

Enter big oil companies, who see LNG as a way out of a difficult spot. Their cash balances are growing thanks to higher oil prices, but building crude-oil production through exploration has become more and more difficult. Many of the large deposits of oil that remain are in the hands of national companies or lie in politically turbulent areas, such as the Caspian Sea north of Iran.

"Oil has become more expensive to find. A number of areas where oil exists are politically complicated," says Steve Lowden, senior vice president of **Marathon Oil** Corp. By contrast, he says, "the cost of finding and developing gas is very competitive."

Indeed, many energy companies have access to huge natural-gas reserves in need of a market. The world is estimated to have enough natural-gas reserves to meet current U.S. demand for the next 2 1/2 centuries. Much of that lies untapped in regions, such as the Middle East, that don't need the fuel for their own consumption. In the past, companies drilling for oil were disappointed when they found natural gas, typically reinjecting the gas into the ground or simply burning it off. The industry burns off enough natural gas each year to supply France, Belgium and the Netherlands with all their energy needs.

Now energy companies are investing a total of \$28 billion to \$30 billion in LNG projects currently under construction, according to Andy Flower, an LNG consultant in London and former head of BP's global LNG activities. Another \$100 billion in projects have been announced, but companies are waiting to see if the Asian-Pacific market, which will influence the economics of these projects, remains healthy enough to sustain demand. The global annual output of LNG will increase 32% to 7.6 trillion cubic feet by the time continuing construction is complete.

A quarter of the new output is in Qatar, where Exxon Mobil, the world's largest public oil company, has a 25% interest in two new cooling plants under construction. It plans to send natural gas to the U.S., to France and to what is planned to be the largest receiving terminal in the world, on Britain's western coast. "We expect LNG supplies to grow fourfold by 2020, largely due to advances in technology that allows us to profitably bring more remote gas resources to market as LNG," Chairman and Chief Executive Lee Raymond told analysts earlier this year.

In the U.S., a dozen efforts are under way to build or enlarge LNG receiving terminals. Three existing LNG terminals in Massachusetts, Louisiana and Georgia are under expansion and a fourth is being reopened in Maryland this summer. Marathon is racing to start construction on what it hopes will be the first West Coast terminal, located a few miles south of the border in Tijuana, Mexico. It hopes to trade access to its West Coast terminal for interest in Indonesian gas fields, adding to an international LNG portfolio that includes production in Equatorial Guinea. Last year, it bought rights to import LNG through a terminal in Georgia.

Three of the U.S. terminals were mothballed during the 1990s because imported LNG couldn't compete with the price of North American natural gas. As this equation reversed, the receiving terminals were reopened. There, the LNG is pumped off the tankers and sent through heated pipes, where the liquid gas expands and returns to its gaseous state before being sent into the pipeline grid.

If LNG use becomes widespread, it could link large and growing energy consumers such as the U.S., China, India and the European Union with vast natural-gas reserves in the Middle East and West Africa, as well as in less-obvious venues such as Australia, Malaysia and Norway.

This, in turn, could help steady the price of natural gas, which is currently subject to extraordinary price volatility because it can't be imported easily to make up for regional shortages. More LNG on the world market could thus ease spikes in heating costs, as well as in costs for industries that use natural gas heavily, such as chemical and fertilizer producers.

An expanded natural-gas market isn't likely to put a large dent in the sale of crude oil, which remains the principal fuel for transportation. But additional supplies of natural gas at stable prices could lessen upward pressure on oil prices. Some large industrial consumers, such as steel manufacturers, can use either oil or natural gas for energy. If oil prices rise, companies could switch more readily to natural gas, helping put a brake on rising oil prices.

U.S. natural-gas producers could be the biggest losers down the road, as more natural-gas imports come ashore. With natural gas more accessible in some countries than in the U.S., imports are likely to bring prices down, just as crude-oil imports have led to lower U.S. oil prices -- and fewer U.S. oil producers. The Aries's cargo, for example, sold in Louisiana for 74 cents less per million BTUs than natural gas produced locally.

R. Skip Horvath, president of the Natural Gas Supply Association, which represents North American natural-gas producers, says his group is in favor of increased LNG imports as a way to reduce price volatility. A more stable market, he says, will keep political heat off the industry; in the past month, both houses of Congress have held hearings about natural-gas pricing.

Another group, the Interstate Oil and Gas Compact Commission, which represents the governors of 30 producing states, cautions that increased LNG imports would make the U.S. more reliant on foreign-energy imports. Natural gas, however, is available in many different parts of the world, so the U.S. wouldn't be as reliant on imports from traditional oil powerhouses in the Organization of Petroleum Exporting Countries.

The prospect of a global LNG market already is prompting a big shift in priorities among energy companies.

BP is scrambling to secure new markets for natural gas as quickly as possible. Last year, BP was part of two long-term agreements to supply natural gas to China, where it is the only foreign company involved in building the first LNG-receiving terminal to serve the world's fastest-growing energy market.

It also signed short-term contacts to purchase natural gas from Qatar and Abu Dhabi, and bought three new LNG-transport vessels to exploit market opportunities wherever they might occur. BP's gas chief, Ralph Alexander, told analysts in February that "the key is to capture markets ahead of supply with a longer-term aim of allowing gas resources to move into the market with the same ease oil does today."

Meanwhile, Royal Dutch/Shell's world-wide natural-gas production has grown 23% during the past five years, while its oil production has grown less than 1%. Natural gas is now 42% of Shell's total production, up from 37% in 1998.

Growth in demand for "natural gas will outstrip that of oil for the foreseeable future," predicts Linda Cook, chief executive of Royal Dutch/Shell's Shell Gas & Power unit. The company believes that the world may consume more natural gas than oil by 2025. The International Energy Agency says natural gas now accounts for 23% of world energy use, while oil's share is 38%.

Some old gas projects are taking on a new glow. In 1984, geologists discovered a massive deposit of natural gas off Sakhalin Island in eastern Russia. The area has an estimated 17 trillion cubic feet of natural gas, enough to power all the residential gas furnaces and ovens in the U.S. for three years. But it wasn't until this May, in the face of growing U.S. demand, that Shell and its partners approved a \$10 billion project to build two offshore platforms, pipelines and a liquefaction plant.

The cost of such projects is falling, thanks to increased competition among construction firms. Technological advances have also helped, including more efficient turbines to power refrigeration units and a new generation of pumps. For example, a new cooling plant in northwest Australia, funded by a group of six companies including Shell and ChevronTexaco, will be built for about \$1 billion and will produce LNG for one-third the cost of the first plants built there in the late 1970s.

Vigorous competition among shipyards has also driven down the cost of the specialized tankers that haul LNG. A tanker that cost \$280 million in the early 1990s now costs between \$150 million and \$175 million. There are currently 141 LNG tankers in operation, and 54 more are on order at shipyards, says Keith Bainbridge, a consultant with LNG Shipping Solutions of London, an international maritime broker.

The newer ships are also larger and can hold more of their cold cargo. They're also built to withstand a considerable collision, allaying fears that the tankers could be floating explosives. In November, a Navy nuclear submarine surfaced under the Norman Lady, an LNG tanker, in the western Mediterranean Sea. The Norman Lady sustained several hull punctures along its starboard side, according to a Pentagon spokeswoman, but didn't lose any cargo.

"LNG will not explode because it's not under pressure," says U.S. Coast Guard Lt. Commander Joseph Snowden. Natural gas, he explains, burns only when "in a proper gas-to-air ratio and that's a very narrow window."

BPA's risk of default grows, GAO says

By Les Blumenthal Herald Washington, D.C., bureau

WASHINGTON -- Congressional investigators say the risk of the Bonneville Power Administration defaulting on its debt to the U.S. Treasury has increased over the past several years as the federal power marketing agency's financial situation has deteriorated.

The General Accounting Office said Bonneville has paid too much for the outside electricity it needed to cover all its customer demands. Its report also says BPA's operational costs have mounted -- especially for protecting endangered salmon runs -- and the utilities it serves are starting to look elsewhere for power.

"The likelihood of greater risk to the Treasury seems to be coming to pass," GAO said.

Wednesday July 23, 2003

The GAO report could provide the impetus for Congress to order a study of Bonneville's future even as the Bush administration raised the possibility the agency, which supplies 45 percent of the electricity in the Northwest, should be sold or privatized.

The House today is expected to approve an energy and water spending bill that directs the Department of Energy to conduct an independent review of Bonneville's "mission, management and financial condition."

Bonneville, which markets the low-cost electricity generated at federal dams on the Columbia and Snake rivers, is part of the Energy Department.

Taking note of the GAO report, the bill says "the net result is that Bonneville continues to operate at significant financial risk, which impacts both ratepayers in the region and taxpayers in the rest of the country."

If the Senate agrees, the Energy Department would be required to submit its report on Bonneville to Congress by the end of 2004, after the election.

Ed Mosey, a spokesman for Portland-based BPA, said every time the federal deficit grows there is talk of selling off the agency.

"The evidence will show it would be a mistake," Mosey said. "The federal system (BPA) is the driving engine of the Northwest's economy and privatization would add costs and increase rates."

Mosey said the GAO, which has long been critical of Bonneville, made some mistakes in its analysis and misinterpreted other factors that have created financial problems for Bonneville.

"It sounds like they waded into water over their heads," Mosey said.

While the GAO report notes Bonneville warned earlier this year there was a 74 percent chance it could miss a Treasury payment, Mosey said that was based on concerns the region was headed for a drought that could affect power production at the federal dams.

The fear of low-water conditions has eased and there is now 100 percent certainty Bonneville will make its Treasury payment this fall, Mosey said. The payments usually are between \$700 million and \$800 million.

Bonneville owes the Treasury \$7.4 billion, money that was used to finance construction of the hydroelectric dams and the region's extensive electricity transmission grid. The agency has not missed a Treasury payment in more than 20 years.

Even so, the GAO said Bonneville's long-term risk of default is greater than it was five years ago because of its "higher costs and because of uncertainty surrounding both its role as electricity provider and its obligations to protect fish and wildlife."

"While BPA has taken steps to improve its financial condition and deal with its long-term challenges, the past such efforts have not entirely succeeded," the report says.

Hydrogen Cars Not Needed, U.S. Experts Say

WASHINGTON (Reuters) - Two U.S. energy experts cast more doubt on Friday on a push to develop hydrogen-powered cars as a means to cut air pollution and reduce oil imports.

Cheaper and faster ways already exist to achieve the same effect, including raising fuel efficiency and toughening environmental standards, David Keith and Alexander Farrell, wrote in Friday's issue of the journal Science.

"Hydrogen cars are a poor short-term strategy, and it's not even clear that they are a good idea in the long term," Farrell, assistant professor of energy and resources at the University of California, Berkeley, said in a statement.

"Because the prospects for hydrogen cars are so uncertain, we need to think carefully before we invest all this money and all this public effort in one area."

President Bush has proposed spending \$1.5 billion over five years to spur development by 2020 of cars that run on hydrogen fuel cells in order to cut dependence on imported oil.

The European Commission has said it plans to spend close to \$2.3 billion (2.1 billion euros) on hydrogen-related research over the next four years.

Hydrogen is present in water, oil, gas and coal. Supporters of a "hydrogen economy" regard it as a clean source of energy that would cut pollution and the carbon dioxide emissions some scientists link to global warming.

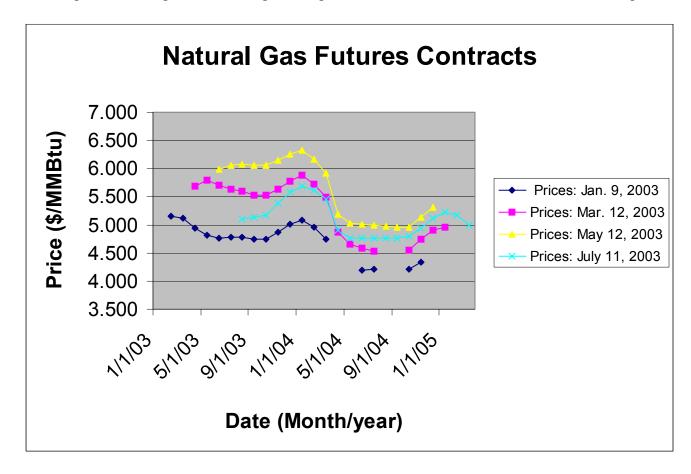
Farrell and Keith, associate professor of engineering and public policy at Carnegie Mellon University in Pittsburgh, noted that hydrogen is derived mostly from oil and coal, which produce substantial carbon dioxide.

They said better fuel efficiency, improvements to car technology and stricter environmental rules could reduce air pollution at less than 100th the cost of hydrogen cars and would be more effective for several decades.

"Automobile manufacturers don't need to invest in anything fancy. A wide number of technologies are already on the shelf," Farrell said. "The cost would be trivial compared to the changes needed to go to a hydrogen car."

Other scientists have also questioned the benefits of hydrogen fuel cells. Leading environmental groups have also criticized the U.S. government and Europe for failing to put renewable energy sources such as wind and solar power at the heart of their hydrogen policies.

Natural gas futures edge down as the gas storage level for the winter of 2003/04 rises at record pace.



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- Power Pool peak load (Tuesday, 7/29): 48,537 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$43.5-59.5 per MWh, Ave. = \$48

Approximate change from previous week
"Normal" price range, before 5/00
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Petroleum, West Texas Intermediate: \$30.24 per barrel (year ago: \$27.48)
Seattle gasoline price (7/29)
\$1.60 per gallon (year ago \$1.49)

• Natural gas, Sumas Hub: \$4.24 per million British Thermal Units (year ago \$2.75)

• Approximate change from last week. Oil: -1.28 per barrel; Nat. gas: -0.09 MMBtu

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- CA ISO Alert Status
 - o A stage 1 alert (7% reserve margin) was declared on May 28, 2003.
 - o A stage 2 alert (5% reserve margin) was declared on July 10, 2002.
 - o Most recent rotating blackouts: Tuesday, May 8, 2001
- Energy News Headlines from California and the Nation
 - o New estimates on Senate carbon dioxide plan (New York Times, July 30)
 - o Plan to toughen fuel economy standards thwarted (LA Times, July 30)

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4. River and Snowpack Information (Updated July 30, 2003)

- Observed June stream flow at The Dalles: 87.1% of average
- Observed July precipitation above the Dalles: 19% of average
- Observed 2003 snow pack as of May 30 (final for 2003): 89% of average
- The latest forecast of Columbia River stream flows this January through July is 89.3 million acre feet, 83 percent of normal: National Weather Service Northwest River Forecast Center.

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6. Winter Load Loss/Reservoir Impacts/Fish (Updated April 21)

- Federal reservoir system storage: 46% full: Precipitation Oct. to date, 93% of normal.
- Estimated winter (2002/03) load loss probability of 1%

7. Power Exchanged: (July 22, 2003)

• Average flow of power during the last 30 days

o California (exported to) 2,985 MW o Canada (imported from) 111 MW o Net power export: 2,874 MW

New Estimates on Senate Carbon Dioxide Emissions Plan

By JENNIFER 8. LEE

An internal analysis by Environmental Protection Agency economists has found that a Senate plan to reduce the carbon dioxide emissions linked to global warming could achieve its goal at very little cost, according to a copy of the analysis made available by a group supporting the plan. This stands in contrast to public statements by Bush administration officials saying the environmental benefits of the plan, which sets limits on emissions of so-called greenhouse gases like carbon dioxide, would come at a significant cost to the nation's economy.

The results of the environmental agency analysis, dated May 23, were never completed and analysts were told not to continue with the study, employees at the agency said. In June, Christie Whitman, who was then the agency's administrator, sent a letter refusing to carry out the study to the proposal's sponsors, Senators John McCain, Republican of Arizona, and Joseph I. Lieberman, Democrat of Connecticut.

In the letter, Mrs. Whitman wrote that the Energy Department's independent statistical office, the Energy Information Agency, was already doing an analysis and "based on past analyses, I would expect that E.I.A.'s cost estimates should not be significantly different from the estimates that E.P.A. would have produced."

But the results do appear to diverge significantly. The Energy Department projects economic harm dozens of times that projected in the internal environmental agency results. The department study says the economy will be reduced by \$106 billion, or six-tenths of 1 percent, in 2025. The E.P.A. results put those losses at from \$1 billion to \$2 billion, or one-hundredth of 1 percent.

Environmental agency officials emphasized that the analysis was preliminary and incomplete

Plan to Toughen Fuel-Mileage Rules Thwarted

By Richard Simon, Times Staff Writer

Democrats from automobile-making states and Republicans wary of government regulation blocked a Senate proposal Tuesday to toughen fuel-mileage standards for motor vehicles, virtually ensuring the provision will be left out of any new energy bill.

The 65-32 vote against the higher requirements culminated a fierce lobbying effort that pitted environmentalists against car manufacturers and the auto workers union.

Environmentalists have called tougher fuel-economy rules the most important step Congress could take to reduce U.S. dependence on foreign oil and emissions of carbon dioxide, a gas linked to global warming.

"How can you have a serious energy bill and not ... address the fuel efficiency of vehicles?" asked Sen. Richard Durbin (D-Ill.).

But with the House rejecting a similar measure earlier this year, environmentalists held little hope that the energy legislation would include the stiffer mileage standards.

Auto makers and auto union leaders contended that the proposal would hurt their industry's competitiveness — resulting in job losses — and lead to lighter, less safe vehicles.

"This is not the place, on the Senate floor, to make a complex decision that should involve a whole host of factors," said Sen. Carl Levin (D-Mich.).

The measure would have required cars and sport-utility vehicles to meet a 40-miles-per-gallon standard by 2015.

Currently, cars must meet an average fuel economy standard of 27.5 mpg — unchanged for more than a decade. The standards for light trucks, including SUVs, minivans and pickups, is 20.7 mpg. That is due to rise to 22.2 mpg for the 2007 model year.

Rather than stiffen the requirements, the Senate approved an industry-backed amendment to direct the Department of Transportation to set fuel-economy standards on factors that include how tougher rules would affect vehicle safety and auto industry jobs.

Environmentalists contend that the measure, which passed 66-30, could set up new obstacles to raising the standards.

The vote came as President Bush and Vice President Dick Cheney met with a bipartisan group of lawmakers at the White House to press them to finish work on an energy bill. Bush has called such a measure vital to economic growth and national security.

The House version of the bill, passed in April, includes a Bush-backed provision to open Alaska's Arctic National Wildlife Refuge to oil drilling. But that measure has been thwarted in the Senate and, like the tougher fuel-efficiency standards, is not expected to be part of a final bill.

Both the Senate and House bills contain other measures to promote domestic energy production, as well as proposals to spur conservation. These include promoting construction of a pipeline to bring natural gas from Alaska to the lower 48 states, expanding nuclear power and doubling the amount of ethanol that must be added to the nation's gasoline supply.

The Senate could vote on its bill this week.

Tuesday's debate on the higher mileage requirements illustrated that the complex politics of the energy debate can produce strange — and temporary — bedfellows. Eighteen Democrats, many of them usually on the opposite side of Republicans on environmental issues, joined virtually all the Senate's GOP members in opposing the tougher standards.

Among the Democrats voting against the measure were Mary Landrieu and John B. Breaux of Louisiana, Levin and Debbie Stabenow of Michigan, Joseph R. Biden Jr. of Delaware, Evan Bayh of Indiana, Zell Miller of Georgia and Barbara A. Mikulski of Maryland. All come from states with vehicle-manufacturing plants.

California Democratic Sens. Dianne Feinstein and Barbara Boxer joined 25 other Democrats, four Republicans and one independent voting for the tougher standards.

Supporters of the measure noted that because of the increasing popularity of SUVs, overall fuel

economy has declined since the 1980s.

But opponents contended that Americans could be deprived of their vehicles of choice.

"I don't want to tell parents ... they cannot get the SUV or minivan they wanted for their family or business because Congress decided it would be a bad choice," said Sen. Christopher S. Bond (R-Mo.).

Sens. John F. Kerry of Massachusetts and Joe Lieberman of Connecticut — both Democratic presidential candidates — have made tougher fuel standards a centerpiece of their proposals to cut U.S. dependence on foreign oil.

But both were absent Tuesday, as was another Democratic presidential contender, Sen. Bob Graham of Florida. Sen. John Edwards (D-N.C.), who is also running for president, voted for the tougher standards.

Bush opposes efforts to legislate what the White House has termed "an arbitrary increase" in fuel standards. He instead advocates tax incentives to encourage consumers to buy gas-electric hybrid vehicles. He also has proposed spending more than \$1 billion to speed up the development of cars that run on pollution-free hydrogen fuel cells.

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- Power Pool peak load (Tuesday, 8/4): 38,973 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$43-51 per MWh, Ave. = \$47.7

Approximate change from previous week
"Normal" price range, before 5/00
\$20-\$40 per MWh

Petroleum, West Texas Intermediate: \$32.23 per barrel (year ago: \$27.48)
Seattle gasoline price (8/4)
\$1.63 per gallon (year ago \$1.50)

• Natural gas, Sumas Hub: \$4.02 per million British Thermal Units (year ago \$2.07)

• Approximate change from last week. Oil: +1.99 per barrel; Nat. gas: -0.22 MMBtu

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 - o Reviving 2002 energy measure foils Senate logiam (LA Times, Aug. 1)
 - o Alcoa: 525 in Ferndale to lose jobs if electricity rates rise (Seattle Times, Aug. 2)

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- Observed June stream flow at The Dalles: 87.1% of average
- Observed July precipitation above the Dalles: 19% of average
- Observed 2003 snow pack as of May 30 (final for 2003): 89% of average
- The latest forecast of Columbia River stream flows this January through July is 89.3 million acre feet, 83 percent of normal: National Weather Service Northwest River Forecast Center.

5. Energy Conservation Achievement (Updated Mar. 10, 2003)

• **State Agencies:** From January to December 2002 electrical usage was 7.6 % less and natural gas usage was 4.1% less compared to the same period in 2000.

6. Winter Load Loss/Reservoir Impacts/Fish (Updated April 21)

- Federal reservoir system storage: 46% full: Precipitation Oct. to date, 93% of normal.
- Estimated winter (2002/03) load loss probability of 1%

7. Power Exchanged: (Aug. 4, 2003)

• Average flow of power during the last 30 days

o California (exported to) 2,623 MW o Canada (imported from) 122 MW o Net power export: 2,501 MW

Hydropower relicensing is good policy

By LINDA CHURCH CIOCCI

The Pacific Northwest's hydropower system has for decades provided many advantages to the residents of the Northwest, including substantial economic advantages. Homeowners have enjoyed electricity rates well below the national average, and inexpensive energy costs have historically helped the region attract jobs.

However, public and private utilities that generate the power driving the Northwest are having to add an increasing factor into power costs -- the cost of relicensing existing facilities. Relicensing -- the process to obtain a new permit from the federal government to operate a hydro facility -- is a process that all parties agree has been broken for years.

In an editorial Wednesday on the U.S. Senate's comprehensive energy legislation, the Post-Intelligencer Editorial Board stated, "the plan would also tilt relicensing of hydroelectric dams in favor of industry-designed environmental provisions." The National Hydropower Association, which counts among its members utilities throughout Washington state, strongly disagrees and believes P-I readers should understand what the recently passed legislation does (and does not) do with regard to hydropower relicensing reform. They should also have some background on how we got to where we are today.

Hydropower relicensing reform is an especially important issue for residents of Washington. More than 74 percent of the Evergreen State's non-federal hydropower capacity (some 18 different projects representing 7,197 megawatts of power) must go through the Federal Energy Regulatory Commission's relicensing process in the next 15 years. The amount of power these projects generate equals the energy needs of about seven cities the size of Seattle!

Since 1986, FERC has been required, under the Federal Power Act, to give "equal consideration" to a variety of factors when issuing hydropower licenses and relicenses. This authority requires FERC to consider the power, economic and development benefits of a particular project, as well as energy conservation and the protection and enhancement of fish and wildlife.

Federal courts, however, have interpreted the Federal Power Act in a way that prevents any effective balancing from taking place. The courts have given federal resource agencies with hydropower jurisdiction (U.S. Department of the Interior, Commerce and Agriculture), and others including state agencies, the authority to set "mandatory" conditions on FERC licenses -- conditions that are automatically made a part of the final license granted to the operating utility.

Why is this a problem? Hydro project owners (and their consumers) are facing higher costs, loss of operational flexibility and lost power generation due to new operating constraints imposed during relicensing that do not effectively balance our energy needs with important environmental goals. A typical hydro project takes approximately eight to 10 years to weave its way through the process, at a cost that can run into the tens of millions of dollars. The contentious process results in uncertainty for the operator and its customers, as well as delays for valuable environmental enhancements.

Here are the facts: The Senate and House bills, passed Thursday and April 11 respectively, allow licensees to propose cost and/or energy-saving alternative license conditions to those proposed by federal resource agencies. Under the bills, the authority of federal agencies to issue mandatory license conditions would remain fully intact. An agency would also have sole authority to determine whether a licensee's alternative satisfies its existing statutory requirements to protect the environment. If an agency determines that those requirements are not met, the alternative would be rejected.

The bills also require agencies to give due consideration to the impacts of their mandatory conditions on the energy, economic, environmental and other public benefits of a hydropower project -- something they are not doing now. This is important as the benefits of hydropower have largely become a lost voice in the licensing process.

The bills -- though this is a fact often overlooked -- do not deny environmental groups, Native American tribes, state agencies or anyone else the right to fully participate in the licensing process as they do today. The licensing process will continue to be the most publicly intensive regulatory process for any energy source in the United States.

Hydropower has long played an important role in our nation's energy and economic strategy and must continue to do so. Our association believes it is possible to have healthy, clean rivers and a viable hydropower industry -- both in the public interest. The legislation reflects this notion and brings responsible reforms to the process. The goal of relicensing reform is to create a process that can effectively address environmental impacts while at the same time recognize and value the many important benefits provided by hydropower projects -- something that rarely occurs as the process today functions.

Relicensing reform legislation is not designed to "tilt" the process in industry's favor. It is an attempt to encourage flexibility and creativity in meeting important resource protection goals while ensuring that our nation's leading emissions-free, domestic, renewable resource is preserved for future generations.

Reviving 2002 Energy Measure Foils Senate Logjam

Tactic may help the GOP tailor an overhaul of national policy that the president favors. By Richard Simon, Times Staff Writer

The Senate on Thursday found an unusual way to overcome differences that have stymied the passage of energy legislation: It went back to the bill passed last year and passed it again.

The surprise action moved Congress a significant step closer to final agreement on a White House priority — the first overhaul of the nation's energy policy in a decade. President Bush has pressed Congress to send him a bill, calling it vital to economic growth and national security.

The Senate vote cleared the way for negotiations on a compromise measure with the House, which passed its version of an energy bill in April.

"In our fondest dreams, we never thought we'd be able to pass a Democratic bill in a Republican Congress," said Minority Leader Tom Daschle (D-S.D.).

Sen. Pete V. Domenici (R-N.M.), who, as chairman of the Energy and Natural Resources Committee, spent months drafting a bill, only to see it scrapped, said, "I guess you wonder why I'm smiling."

"I'll be rewriting [the] bill," he said, noting that he will preside over the negotiations. "We're in the majority. We'll write a completely different bill [with] a lot more production ... a lot more nuclear and other kinds of energy."

Energy legislation died last year when the GOP-controlled House and the Democratic-led Senate

came to loggerheads. But this year, both chambers are dominated by Republicans, who are eager to deliver on one of Bush's domestic priorities.

Balanced Policy Sought

"The president looks forward to working with the [House-Senate] conferees to ensure that we enact a balanced and comprehensive energy policy this year," White House spokesman Scott McClellan said in a statement Thursday night.

As an inducement to many senators to act, a final bill is virtually certain to include a measure, popular in farm states, to double the amount of corn-based ethanol added to the nation's gasoline supply.

The decision by the Senate's Republican majority to toss out a GOP-drafted bill and substitute a measure approved when the chamber was under Democratic control came as a surprise. But it broke a partisan impasse that, with the Senate poised to recess for the summer, threatened to carry the energy debate over until fall and possibly jeopardize passage of the bill.

The bill was approved 84 to 14. Democrats Barbara Boxer and Dianne Feinstein of California were among the 11 members of their party who joined three Republicans in voting against it. Two Democratic candidates, John F. Kerry of Massachusetts and Joe Lieberman of Connecticut, did not vote.

The decision to pass last year's bill again was the result of a deal brokered on the Senate floor by Daschle and his Republican counterpart, Majority Leader Bill Frist of Tennessee.

Responding to GOP accusations that Democrats were slowing the energy debate — which on Thursday was in its 18th day — Daschle told Frist: "If our Republican colleagues really wanted to get a bill, what would have been wrong with taking a bill that 88 of us voted for last year?"

Frist responded: "Let's do it." Minority Whip Harry Reid of Nevada later told Frist, "You've got yourself a deal."

Republicans met privately and, with the blessing of the White House, accepted the offer.

Last year's nearly 1,000-page Senate bill includes many of the same provisions as the bill drafted this year. It would provide federal loan guarantees to spur construction of a \$20-billion pipeline to carry Alaska natural gas to the Lower 48 states. It would offer close to \$15 billion in tax incentives, roughly evenly divided between conservation and production measures. And it would extend a cap on the nuclear industry's liability in accidents, a provision designed to remove an obstacle to expansion of nuclear power.

But last year's bill also does not include a number of provisions that were part of the scrapped GOP-drafted bill. Among these: federal loan guarantees to spur building of more nuclear power plants, Bush's \$1-billion-plus plan to speed up the development of cars that run on pollution-free hydrogen fuel cells, and an inventory of offshore oil and natural gas reserves.

Domenici is expected to add many of those provisions to the bill during negotiations with the House.

Unlike the House bill, the Senate measure eschews Bush's goal of opening Alaska's Arctic National Wildlife Refuge to oil and gas drilling. That provision is not likely to be in a final bill.

Neither bill includes tougher vehicle miles-per-gallon standards sought by environmentalists.

Lawmakers from both parties saw benefits to pulling last year's bill off the shelf.

"The Democrats didn't want to be accused of obstructionism," said Republican Trent Lott of Mississippi. "And the Republicans want a result."

Democrat Kent Conrad of North Dakota added, "If the best we can do is pass last year's bill, let's do it."

Daschle Happy With Bill

Although Domenici vowed to rewrite the bill, Daschle said Democrats are in a strong position going into negotiations with a Democratic, rather than a Republican, measure.

Boxer said she opposed the bill because it does not offer the "sound and innovative policy that we need to reduce our dependence on foreign oil, protect the environment, improve our energy and fuel efficiency, and protect consumers from Enron-like scams."

Democrat Maria Cantwell of Washington, who also voted against the measure, complained that it didn't address the price manipulation of energy markets.

"In the last year we learned that Enron stomped on consumers, deceived investors and laughed at us all," she said. "With no new consumer protections in this energy bill, energy companies still get the last laugh."

Senate leaders pledged to allow lawmakers to seek amendments to spending bills later this year that would deal with problems spotlighted by California's 2000-2001 energy crisis.

Some senators agreed to the substitution only after receiving commitments from their leaders that they would get a vote later this year on their energy-related proposals, including a measure by Lieberman and Republican John McCain of Arizona that is designed to cut emissions of carbon dioxide and the other greenhouse gases that contribute to global warming.

Environmental groups, which did not like last year's bill, did not like it any better Thursday, contending that it falls short of the goal of substantially reducing U.S. dependence on foreign oil.

"Last year's failure of a bill didn't deserve a second chance," said Katherine Morrison, a staff attorney of the Public Interest Research Group.

Alcoa: 525 in Ferndale to lose jobs if electricity rates rise

By Ben Aguirre Jr., Seattle Times business reporter

For the second time this year, Alcoa plans to lay off employees because of a possible power-rate increase.

The Pittsburgh-based aluminum company formally notified 525 employees in **Ferndale**, Whatcom County, yesterday that the plant could close indefinitely if Bonneville Power Administration implements a 5 percent rate increase. Earlier this year, the plant laid off about 125 employees after Bonneville said it needed to increase rates.

"We strongly encourage them not to jeopardize 600 jobs," said Mellani Hughes, public-affairs and communications manager for Alcoa's northwest region.

Bonneville originally planned to decrease rates this year, but after fears of not being able to make federal loan payments for 2003, it asked for a 5 percent increase, Hughes said.

Alcoa sent notices to employees yesterday to comply with a federal law that requires employers to notify their employees 60 days in advance of a layoff. If rates go down, Hughes said, the plant may stay open.

However, Ed Mosey, a spokesman for Bonneville, said rates have to go up so the company can make its annual payment on the loan it received to build the power system. The increase could be eliminated if a lawsuit filed against Bonneville were settled, Hughes said, because it would free up \$200 million and decrease rates by 6 percent.

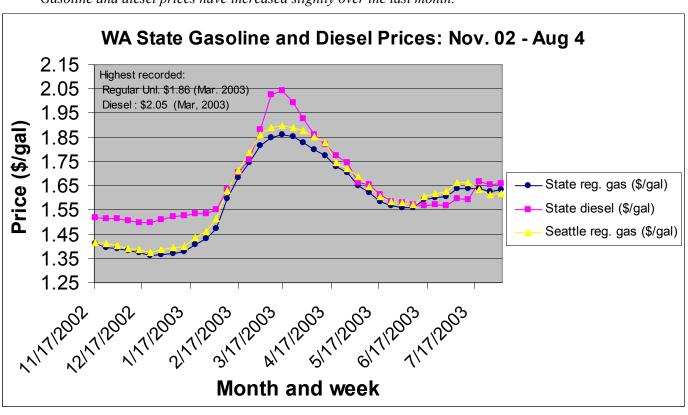
Because demand for energy was so great in 2001, Bonneville was almost forced to turn to the market for more power, Mosey said. Instead, the administration decided it would be cheaper to pay investor-owned companies, such as Puget Sound Energy, for their allotted power. Shortly after the contracts were signed, public-utility customers filed a lawsuit saying Bonneville paid too much.

If the lawsuit is settled within the next month, Mosey said, it would negate the 5 percent increase Bonneville plans to implement Oct. 1.

Alcoa's decision to send layoff notices was not a political statement, Hughes said, but a necessary one because the plant would not be able to operate if the increase went into affect.

Alcoa shut down the **Ferndale** plant in 2001 because of the energy crisis and reopened it almost a year later in April 2002 at a lower production rate.

Gasoline and diesel prices have increased slightly over the last month.



Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 8/12): 44,996 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$39-46.75 per MWh, Ave. = \$41.7

Approximate change from previous week
 "Normal" price range, before 5/00
 \$-6.0 per MWh
 \$20-\$40 per MWh

Petroleum, West Texas Intermediate: \$32.01 per barrel (year ago: \$26.87)
Seattle gasoline price (8/12)
\$1.66 per gallon (year ago \$1.50)

• Natural gas, Sumas Hub: \$4.22 per million British Thermal Units (year ago \$2.07)

• Approximate change from last week. Oil: -0.22 per barrel; Nat. gas: +0.21 MMBtu

3. California Electricity Situation

- CA ISO Alert Status
 - o A stage 1 alert (7% reserve margin) was declared on May 28, 2003.
 - o A stage 2 alert (5% reserve margin) was declared on July 10, 2002.
 - o Most recent rotating blackouts: Tuesday, May 8, 2001
- Energy News Headlines from California and the Nation
 - Automakers drop suit over clean air regulation (New York Times, Aug. 12)
 - o Canada chips in on Kyoto treaty (Seattle PI, Aug. 12)

4. River and Snowpack Information (Updated July 30, 2003)

- Observed June stream flow at The Dalles: 87.1% of average
- Observed July precipitation above the Dalles: 19% of average
- Observed 2003 snow pack as of May 30 (final for 2003): 89% of average
- The latest forecast of Columbia River stream flows this January through July is 89.3 million acre feet, 83 percent of normal: National Weather Service Northwest River Forecast Center.

5. Energy Conservation Achievement (Updated Mar. 10, 2003)

• **State Agencies:** From January to December 2002 electrical usage was 7.6 % less and natural gas usage was 4.1% less compared to the same period in 2000.

6. Winter Load Loss/Reservoir Impacts/Fish (Updated April 21)

- Federal reservoir system storage: 46% full: Precipitation Oct. to date, 93% of normal.
- Estimated winter (2002/03) load loss probability of 1%

7. Power Exchanged: (Aug. 12, 2003)

• Average flow of power during the last 30 days

o California (exported to) 2,641 MW o Canada (imported from) 187 MW o Net power export: 2,454 MW

Automakers Drop Suits Over Clean-Air Regulation

By DANNY HAKIM, NYT Aug. 12

General Motors and DaimlerChrysler are dropping lawsuits against California over a landmark clean-air regulation that requires the production of millions of low-emission cars and trucks over the next decade and a half.

The move creates a temporary but momentous environmental truce between the auto industry, which has blocked the zero-emission vehicle mandate that was set in motion in 1990, and California, which wields enormous influence over the global industry.

The threat of the Z.E.V. mandate, as it is known in the trade, spurred the development of hybrid vehicles, which supplement gasoline with electric power. Now, with the dropping of the legal challenge — unless other hurdles emerge — every major automaker will have to start selling a range of vehicles with low emission levels of smog-forming pollutants, like hybrids and specially modified gas cars, in a plan that will phase in such vehicles in California between 2005 and 2020.

Automakers will also have to sell tens of thousands of zero-emission vehicles, either battery-powered cars or, far more likely in the long term, vehicles powered by hydrogen fuel cells.

"Given the fact that General Motors and DaimlerChrysler, the companies with most concern about the regulation, have come to agreement," said Dr. Alan C. Lloyd, the chairman of the California Air Resources Board, "I'm hoping it spells a new era of working more effectively together."

G.M. — which sells some high-emission vehicles like Hummers, Cadillac Escalades and Chevrolet Suburbans — withdrew from the battle as part of an effort to enhance its environmental image that included a previous announcement that it would sell hybrids.

But it has also been reassured by recent steps of California regulators. The state amended its requirements in April to emphasize more low-emission and fewer zero-emission cars. In recent weeks, coinciding with negotiations over the suits, the air board expanded its credit system for hybrids to include a wider variety of vehicles.

Elizabeth Lowery, G.M.'s vice president for the environment and energy, said: "One thing we've been working hard on is getting credit for all the things we do, but people are focusing on the litigation in California. We think we have enough flexibility in this rule in order for us to put this litigation behind us."

A spokeswoman for DaimlerChrysler, Ann Smith, said "we've had constructive discussions regarding the settlement" but declined to elaborate. The two big auto companies had filed their lawsuits jointly, but no other major manufacturer took part.

The industry and the state could soon clash again. Last year, California passed the nation's first legislation aimed at limiting automotive emissions of greenhouse gases, and a legal challenge is seen as a strong possibility.

Dr. Lloyd said the greenhouse-gas law was pointedly not a topic of debate while the two sides were negotiating. "We stayed very much away from that," he said, adding, "It's our hope that we will be able to work together on the greenhouse-gas regulation."

Ms. Lowery of G.M. said: "We don't think mandates are a good idea. The resolution of this does not change that position." She added that "the industry will challenge any regulation that is pre-empted by federal law."

The zero-emissions mandate was challenged in court on the ground that parts of it went beyond matters of vehicle emissions and tried to supersede federal authority to set fuel economy standards; a Bush administration filing supported the suit.

The industry could have a stronger case on greenhouse-gas emissions, because they are directly correlated to fuel economy. Emissions of smog-forming pollutants can be filtered by catalytic converters.

California is the largest auto market, and is particularly influential because its air standards predated the federal Clean Air Act. The state thus sets it own air standards and other states can choose California's tougher rules over federal regulations. Northeastern states that have followed California on air-quality standards, like New York and Massachusetts, have previously announced plans to adopt their own versions of the zero-emissions regulation. That will mean that advanced-technology vehicles will be more widely available there.

The zero-emissions mandate was introduced in the early 1990's, intended to spur development of battery-powered cars, which the industry now sees as a dead end. Many automakers, though, have built up credits by selling a variety of such vehicles, from gussied-up golf carts to an electric version of Toyotas RAV4 sport utility.

The current zero-emissions rule is focused more squarely in the long term on fuel-cell cars, which are electric cars with an onboard power system that generates electricity through a chemical reaction involving hydrogen. Fuel-cell cars emit only water vapor, though producing hydrogen leads to varying emissions.

The Bush administration has also talked up the promise of hydrogen, even in the State of the Union address, but has so far restricted its activity to financing research.

Automakers are also working on more immediate technologies to cut emissions, from hybrids to advanced diesels to improved internal combustion engines, and any one of them could play a role in meeting the zero-emissions mandate.

"Basically, we're talking about a giant technological horse race here and everyone's hoping their horse is Seabiscuit," Gary Cowger, G.M. president of North American operations, said last week.

He added that G.M., like other automakers, was hedging bets by developing a variety of prototypes. The settlement coincides with G.M.'s demonstration of many of its green vehicles at Dodger Stadium this week. Earlier this year, it announced a plan to start selling hybrid vehicles of various types, the most ambitious being a hybrid version of its Saturn Vue sport utility in 2005. Toyota and Honda already sell hybrids. G.M. has also been bullish on the fuel cell.

Environmental advocates said the prospect that the zero-emissions mandate would take effect after so many years of regulatory limbo would keep California well ahead of the federal government. Their frustration with Washington and Detroit has grown along with sport utility sales. In the 2002 model year, the fuel economy of the average new American passenger vehicle reached a 22-year low.

"The Bush administration has been talking about a fuel-cell vision; California is actually delivering on one," said Jason Mark, director of the clean-vehicles program at the Union of Concerned Scientists.

"It's encouraging that G.M. has decided to join the fight for clean air in the state," he added.

Such groups remain wary of G.M., however. "By suing California on environmental laws and building Hummers, they seem like they're in a race to the bottom to be seen as the worst environmental auto company," said Roland Hwang, a senior policy analyst at the Natural Resources Defense Council.

Dropping the suit "removes a real black eye for the company," he added, "but that's a far different thing from saying it will enhance their image."

In California, other factors could influence the regulatory landscape, like the gubernatorial recall campaign. It features Arnold Schwarzenegger, the biggest celebrity booster of G.M.'s Hummer, and the columnist Arianna Huffington, an outspoken basher of sport utilities who has likened the current campaign to "the hybrid versus the Hummer."

A new governor would have the power to replace Mr. Lloyd.

Mr. Schwarzenegger, though, may have an affinity for fuel-cell-boosting regulation. In "Terminator 3," his friendly cyborg character informs the audience that he is powered by hydrogen fuel cells. Unfortunately, the cells have a tendency to rupture and explode, like everything else in the movie.

Dave Barthmuss, a G.M. spokesman asked for comment, replied, "Those aren't G.M.-designed."

Canada chips in on Kyoto treaty

Ottawa to set aside \$1 billion to slow global warming

By STEVEN CHASE, Sea PI, Aug. 12

Canada is set to dole out \$1 billion, or half, of the funding for the Kyoto Protocol aimed at slowing global warming, even as doubts remain about whether the controversial environmental treaty ever will come into force.

Sources said the announcement is scheduled for today.

One of the most popular elements of the Kyoto spending will be rebates of as much as \$1,000 for Canadians who retrofit their homes to make them more energy-efficient.

But critics said Ottawa is jumping the gun because it is not certain that Kyoto will ever be a binding pact. The accord will not come into force until countries representing 55 percent of global emissions ratify the deal.

Russia, with 17.4 percent of global emissions, is the only remaining country that could activate the Kyoto deal, and it has yet to say whether it will ratify it. Canada did so in December.

Steven Guilbeault of Greenpeace said he remains optimistic that Russia will ratify Kyoto despite its stalling. He said Russian President Vladimir Putin, who will help open a late September conference on climate change in Moscow, will commit to endorsing the treaty there.

Canadian Alliance environment critic Bob Mills said that rolling out the Kyoto-fund disbursement now appears to be more of a legacy announcement for retiring Prime Minister Jean Chretien, who leaves office in less than six months.

Ottawa set aside nearly \$2 billion in the February federal budget to pay for actions that reduce greenhouse-gas emissions believed to cause climate change.

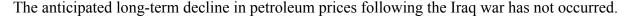
The government will announce about \$70 million to fund the home-energy retrofit program, which will subsidize upgrades and tests to lower home-energy use. Upgrades that boost energy efficiency include better insulation, sealing, weatherstripping, windows, ventilation and heating equipment.

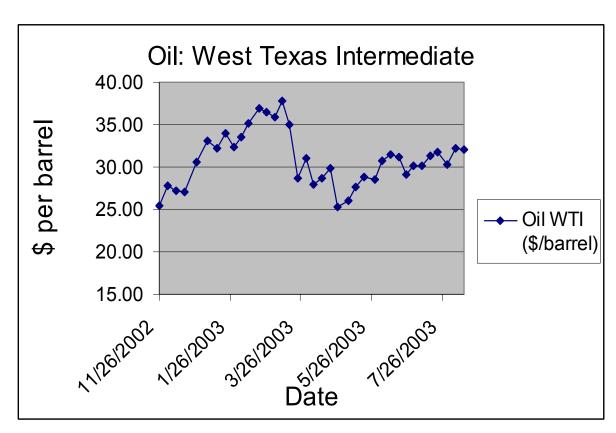
Other spending to be announced includes tens of millions of dollars for ethanol-industry subsidies, about \$40 million for commercial-building retrofits and \$150 million to fund partnerships with provinces and municipalities on climate-change abatements.

Business groups raised concerns about whether Ottawa should spend cash on Kyoto when there are more pressing issues, such as the effect of the SARS virus on the Canadian economy.

Rebates for businesses that installed eco-friendly heating and cooling systems were supposed to be a major component of the Renewable Energy Deployment Initiative when it was unveiled years ago.

Although a fraction of the money went to rebates, the program spent nearly 60 percent of its cash on support, marketing and promotion costs in six years.





Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 8/19): 46,880 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$41.75-47.75 per MWh, Ave. = \$44.5

Approximate change from previous week
"Normal" price range, before 5/00
\$\frac{4}{2.7}\$ per MWh
\$\frac{20}{40}\$ per MWh

Petroleum, West Texas Intermediate: \$30.70 per barrel (year ago: \$26.87)
Seattle gasoline price (8/19)
\$1.85 per gallon (year ago \$1.50)

• Natural gas, Sumas Hub: \$4.55 per million British Thermal Units (year ago \$2.07)

• Approximate change from last week. Oil: -1.30 per barrel; Nat. gas: +0.33 MMBtu

3. California Electricity Situation

- CA ISO Alert Status
 - o A stage 1 alert (7% reserve margin) was declared on May 28, 2003.
 - o A stage 2 alert (5% reserve margin) was declared on July 10, 2002.
 - o Most recent rotating blackouts: Tuesday, May 8, 2001
- Energy News Headlines from California and the Nation
 - o Energy department will take control of blackout investigation (New York Times, Aug. 19)
 - o Gasoline prices soar after blackout (Seattle PI, Aug. 19)

4. River and Snowpack Information (Updated Aug. 19, 2003)

- Observed July stream flow at The Dalles: 62.7% of average
- Observed July precipitation above the Dalles: 20% of average
- Observed 2003 snow pack as of May 30 (final for 2003): 89% of average
- The latest forecast of Columbia River stream flows this January through July is 89.3 million acre feet, 83 percent of normal: National Weather Service Northwest River Forecast Center.

5. Energy Conservation Achievement (Updated Aug. 19, 2003)

• **State Agencies:** From April to June 2003 electrical usage was 15.3 % less and natural gas usage was 10.9% less compared to the same period in 2000.

6. Winter Load Loss/Reservoir Impacts/Fish (Updated April 21)

- Federal reservoir system storage: 46% full: Precipitation Oct. to date, 93% of normal.
- Estimated winter (2002/03) load loss probability of 1%

7. Power Exchanged: (Aug. 19, 2003)

• Average flow of power during the last 30 days

o California (exported to) 2,681 MW o Canada (imported from) 1256 MW o Net power export: 2,425 MW

Energy Dept. Will Take Control of Blackout Investigation

By JAMES GLANZ and ANDREW C. REVKIN

The Department of Energy has agreed to lead a sweeping investigation to determine precisely how a huge swath of the nation's electrical system collapsed last week, draining power from tens of thousands of miles of high-voltage electrical lines, leaving millions in the dark and inflicting widespread damage on local economies from Detroit to New York.

Energy Department officials said that the investigation would employ hundreds of experts from federal agencies, national laboratories and the organizations that control the flow of electricity on the nation's power grid, and would take responsibility for discovering an answer outside an industry organization that had been leading the initial inquiry.

"The electric transmission grid is quite possibly the most vital piece of infrastructure which we have," said the secretary of energy, Spencer Abraham, in Washington yesterday afternoon. "We owe ourselves an explanation of this incident and an assurance that steps will be taken to address the cause."

Mr. Abraham promised explicitly that the investigation would make no attempt to shield the electric power industry from responsibility for the blackout, the largest in the nation's history. But Mr. Abraham also made clear that he took a dim view of early speculation on the causes of the blackout. Some experts have pointed to failures in high-voltage transmission lines controlled by FirstEnergy Corporation, in Ohio, as the first of a cascade of failures in the catastrophe.

"We have already seen many theories abound," Mr. Abraham said, adding that the evidence — though still sketchy — would be pursued no matter where it led. "There is no effort on our part at this point to hold back this investigation or hold back ultimately the findings that we come up with."

Mr. Abraham, a former senator from Michigan who once advocated dismantling the Department of Energy, is regarded as a solid conservative who favors free trade and dislikes environmental regulations, but also as someone who has occasionally challenged the Republican orthodoxy.

Several experts, including former Energy Department engineers and consultants to industry regulators, said yesterday that they had concluded that only human error could explain the hourlong sequence of transmission-line short circuits in Ohio that preceded the blackout. They said one of two things had to have happened: either engineers overestimated the power-handling capacity of the lines or operators overestimated how much power could be shunted from one to the others when things started to go wrong.

Other energy experts described trends in the eastern grid over the last three years hinting at growing, and potentially dangerous, imbalances between the amount of power flowing in from plants and the amount used by customers.

Officials with the industry organization that had been leading the first investigative work, the North American Electric Reliability Council, applauded the federal inquiry, but they and others have made clear the dimensions of the task: investigators must knit together data that traces hours of voltages, electrical current and power output in increments of fractions of a second at hundreds of generators and substations sprinkled over half a dozen different regional grids.

Tuesday August 19, 2003

"Their need to do this is completely understandable," said Ellen Vancko, a spokeswoman for the council. "This is an international event. It affected Canada, it affected the U.S. It's essential that the federal government take a leading role."

The decision by the department to lead the investigation was first reported by The Los Angeles Times.

Yesterday's announcement gave no firm time frame for the Energy Department's investigation. In 1996, a federal investigation of a blackout that affected four million people in the western United States took about two months to settle on a cause.

Mr. Abraham said that he planned to meet in Detroit today with Canada's minister of natural resources, Herb Dhaliwal, to discuss a plan for combining the two countries' investigative efforts.

The Energy Department's investigation will not have to begin from scratch. One of the agencies that will assist in the effort, the Federal Energy Regulatory Commission, has had staff members around the clock at a Midwestern nerve center for the grid, said Robert Gramlich, economic adviser to the reliability council's chairman, Pat Wood III.

The data that is already being collected at that nerve center, called the Midwest Independent Transmission System Operator, should — when combined with information from other regional centers — yield a complete record of the catastrophe, Mr. Gramlich said.

"It's not like we're searching for pieces in cornfields in Ohio," Mr. Gramlich said.

The Energy Department has already started to send its own investigators to the regional centers on missions to collect tremendous amounts of data. One of those investigators has already arrived at the New York Independent System Operator, which operates the grid in New York State, said Ken Klapp, a spokesman for that regional control center.

In that region alone, Mr. Klapp said, there are sensors in hundreds of generators and substations run by eight different utilities along 11,000 miles of high-voltage transmission line.

Despite the shift to the Energy Department, the reliability council headquarters in Princeton, N.J., will almost certainly remain a hub of the investigation. There, information from the regional centers is already being analyzed. Wall projectors are displaying ever-evolving spread sheets with parallel columns showing, moment by moment, what conditions were recorded in various locations around the power system across the continent.

The information can help determine how conditions vaulted around the system, said Donald M. Benjamin, vice president of the reliability council, in much the same way that scattered seismographs help geologists locate the epicenter of an earthquake.

Some experts have found evidence they say points to a troubling rise in errors in how power flow is balanced across the sprawling grid. One of the most important standards is aimed at maintaining a constant frequency in the waves of electricity pulsing through the system.

A recent analysis of the quality of the electrical flow in the eastern part of the grid showed a significant rise since 2000 in potentially destabilizing variations from the ideal frequency of 60 hertz, or cycles per second.

The size of such errors is considered an index of how well those operating the grid are balancing from moment to moment the amount of power being pumped into the system by plants and sucked out by customers, said Robert Blohm, an energy consultant and council adviser who did the study.

"When there is a divergence from 60, that means someone supplied too much or didn't take enough," Mr. Blohm said. If the frequency in the lines strays too far, power plants can be triggered to shut down to prevent their giant, high-revving turbines from starting to vibrate and possibly fly apart.

It is not clear whether the general rise in the size of frequency errors relates to what happened last Thursday, experts said, but the trend has caught everyone's attention.

Other experts on the grid said it was already beginning to be clear — when the specific train of events last Thursday was closely examined — that human error had to have played some role in the hour preceding the blackout. Short-circuited lines should have been manageable.

"That should not have resulted in any overload of any other piece of equipment on the system," said Howard F. Illian, a consultant who has worked for the reliability council.

Still, 26 minutes after the first line failed, another began to heat and sag until power jumped to a nearby tree, shorting out the line.

"Either the rating on the line was incorrect or the line was overloaded," Mr. Illian said. "Either way there was some error made there."

Gasoline prices soar after blackout

By H. JOSEF HEBERT

As the summer vacation season winds down, tourists trying to escape high temperatures are facing soaring gasoline prices.

Thursday's power blackout didn't help matters as it temporarily shut down seven refineries in the United States and Canada, worsening an already tight gasoline supply situation. Problems with refineries and pipelines in the West also boosted prices.

Prices at the pump jumped an average of about 10 cents a gallon nationally in the past three weeks and spiked much higher in some places, according to the Energy Information Administration, part of the Energy Department.

The agency said the average price was \$1.627 a gallon in the government's latest survey Monday, nearly 24 cents a gallon higher than prices motorists were paying the same time a year ago. Depending on region, prices were 16 cents to 36 cents a gallon higher than last year.

"It's likely that prices will continue to increase through Labor Day; after that demand will fall off," EIA analyst Douglas MacIntyre said Tuesday.

The impact on prices by the refinery shutdowns was blunted because most of them reopened fairly quickly, once electricity was restored, although some were not yet at full production by midweek.

With the exception of one refinery, "we don't think any of them suffered any damage," said Bob Slaughter, president of the National Petrochemical and Refiners Association. He said most restarted Friday or over the weekend and were moving back to normal operation.

But he added: "The supply and demand balance is so tight that if you lose major output even for a day it does have some impact. Almost anything can have an impact on prices."

Last spring, when Mideast oil fields averted any serious damage as a result of the Iraq war, there were predictions of low gas prices through the summer. But then:

- -Crude prices increased, staying above \$30 a barrel.
- -Gasoline stocks remained tight, below normal levels.
- -In California, refining glitches developed in the production of ethanol-laced gasoline.
- -A major pipeline sending gasoline from Texas to the Phoenix area burst. Prices soared in Arizona and producers began pushing gasoline that would have been used in California into Arizona.

Gasoline prices across the West increased sharply last week, averaging \$1.887 a gallon, up 17 cents a gallon in only a week and 36 cents a gallon over the same time a year ago. West Coast gasoline normally is more expensive than that in the rest of the country, but the dramatic increase this summer caught many by surprise.

The refineries that were thrown out of service by the blackout - two near Toledo, Ohio, one near Detroit and four in Canada - only added to other problems that have been pushing up prices, say government and industry officials.

Together, the seven refineries that were shut down process more than 672,000 barrels a day of crude into gasoline and other refined products, according to industry estimates. Typical summer demand nationwide is more than 9 million barrels of gasoline a day.

A Marathon-Ashland refinery near Detroit was still out Tuesday after an explosion in its boiler unit during the blackout-related shutdown Thursday, officials said. It is expected to be back in operation soon, they said.

Ed Murphy, a vice president at the American Petroleum Institute, said gasoline stocks have been affected by the tight inventories, higher than expected demand and the high cost of crude oil, which has stayed above \$30 a barrel.

"We've had a big demand increase in the last few weeks," said MacIntyre of the EIA. He said gasoline use increased by about 300,000 barrels a day this summer, compared with last summer. Demand peaked at a record 9.6 million barrels a day during the third week in July, according to EIA.

Wholesale gasoline prices spiked in after-hours trading Thursday when traders feared the blackout might force refineries down for a longer time, but then receded when the shutdowns appeared to be short in duration, said Kyle Cooper, an energy analyst for Citigroup Global Markets in Houston.

Cooper predicted the price impact would be minimal. "You might see another couple of pennies" added at the pumps because of the blackout, he said.

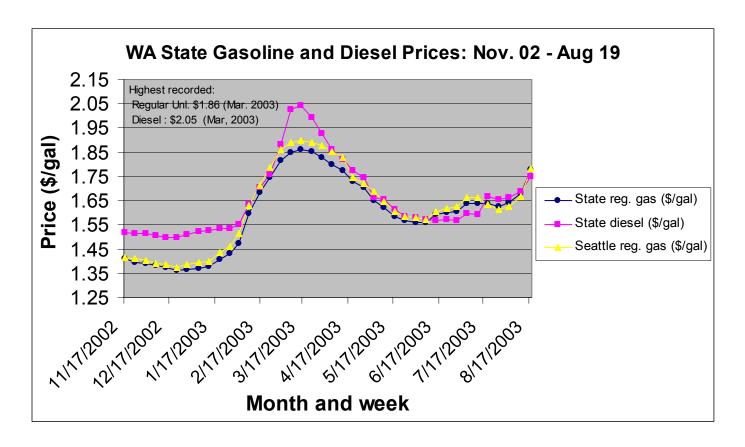
Things could have been much worse.

MacIntyre said a massive New Jersey refinery, owned by ConocoPhillips, which processes 250,000 barrels of crude a day, continued operating even though the blackout shut down a power plant on site. If the refinery had gone down there could have been a major supply problem in the Northeast, he said.

As it was, refineries in New Jersey and Pennsylvania and along the Gulf Coast - which account for much of the supplies in the Northeast and Midwest - were not affected, he said. As a result price

increases in the Midwest were on average only 3 cents to 4 cents a gallon higher this week over the previous week, according to the EIA.

Gasoline prices have risen sharply over the last several weeks, due to continued high crude oil prices, extremely low inventories, and refinery and pipeline problems.



Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 8/26): 45,655 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$33-42.5 per MWh, Ave. = \$38.5

Approximate change from previous week
"Normal" price range, before 5/00
\$20-\$40 per MWh

Petroleum, West Texas Intermediate: \$31.56 per barrel (year ago: \$26.87)
Seattle gasoline price (8/26)
\$1.94 per gallon (year ago \$1.49)

• Natural gas, Sumas Hub: \$4.47 per million British Thermal Units (year ago \$2.07)

• Approximate change from last week. Oil: +0.86 per barrel; Nat. gas: -0.08 MMBtu

3. California Electricity Situation

- CA ISO Alert Status
 - o A stage 1 alert (7% reserve margin) was declared on May 28, 2003.
 - o A stage 2 alert (5% reserve margin) was declared on July 10, 2002.
 - o Most recent rotating blackouts: Tuesday, May 8, 2001
- Energy News Headlines from California and the Nation
 - o 14-day gas price jump sets record (LA Times, Aug. 26)
 - o No price fixing evidence as gas prices rise (Seattle PI, Aug. 26)
 - o Despite improvements blackout could happen here (Sac. Bee, Aug 15)

4. River and Snowpack Information (Updated Aug. 19, 2003)

- Observed July stream flow at The Dalles: 62.7% of average
- Observed July precipitation above the Dalles: 20% of average
- Observed 2003 snow pack as of May 30 (final for 2003): 89% of average
- The latest forecast of Columbia River stream flows this January through July is 89.3 million acre feet, 83 percent of normal: National Weather Service Northwest River Forecast Center.

5. Energy Conservation Achievement (Updated Aug. 19, 2003)

• **State Agencies:** From April to June 2003 electrical usage was 15.3 % less and natural gas usage was 10.9% less compared to the same period in 2000.

6. Winter Load Loss/Reservoir Impacts/Fish (Updated April 21)

- Federal reservoir system storage: 46% full: Precipitation Oct. to date, 93% of normal.
- Estimated winter (2002/03) load loss probability of 1%

7. Power Exchanged: (Aug. 19, 2003)

• Average flow of power during the last 30 days

o California (exported to) 2,681 MW o Canada (imported from) 1256 MW o Net power export: 2,425 MW

14-Day Gas Price Jump Sets Record

Another 18-cent surge pushes the average for California motorists above \$2 a gallon.

By Elizabeth Douglass

California gasoline prices rocketed 18 cents a gallon for the second week in a row, federal officials said Monday, forcing motorists to pay an average \$2.101 a gallon as they gear up for Labor Day weekend.

The increase is the steepest 14-day jump recorded in California by the federal Energy Information Administration, which began tracking weekly retail prices here in 1995. The largest one-week increase came March 29, 1999, when the cost of a gal-ln of self-serve regular soared 22.8 cents.

Nationwide, average prices jumped 12 cents to \$1.747 a gallon over the last week.

Government and oil industry officials attribute the surging prices to low inventories of gasoline, exacerbated by blackout-related refinery outages in the East and Midwest, mechanical troubles at several West Coast refineries and a pipeline break in Arizona that left hundreds of Phoenix stations without fuel.

"Those are legitimate cases for a temporary spike in prices, but I don't see how it justifies this huge spike," said Anthony Sabino, an associate law professor St. John's University's Peter J. Tobin College of Business, where he specializes in oil and natural gas issues. "One has to question the timing of this ... coming just before the biggest driving weekend of this country."

Anita Mangels, a spokeswoman for the Western States Petroleum Assn., rejected the suggestion that oil companies were driving up prices to juice their profits.

"We're very much aware of and sensitive to consumer concerns and suspicions as to the reasons, but the facts are very clear that this is a reaction to market conditions," Mangels said. "When you have disruptions in supply and distribution in three Western states, there will inevitably be impacts on the market, and there's just no getting around that."

In mid-August, mechanical problems hit four California refineries, causing statewide production to drop by 10% at one point, said Claudia Chandler, assistant executive director of the California Energy Commission. In addition, problems squelched gasoline production at a Washington refinery that sometimes supplements California supplies.

California also has been squeezed by the pipeline rupture in Arizona. A corroded gasoline pipeline from Texas burst July 30, effectively cutting off 30% of Phoenix's supply.

California refineries sent extra gasoline east to ease the crunch, and the diversion boosted prices here. Kinder Morgan Energy Partners, which owns the pipeline, bypassed the damaged segment Sunday and resumed large shipments of fuel to Phoenix.

California's prices remain below the record average of \$2.145 hit March 17. But experts say pump costs probably will stay high — or even increase — before dipping next month as consumer demand ebbs with the end of the vacation season.

Of the major cities surveyed by the Energy Information Administration, Los Angeles had the sharpest rise, up 21.9 cents to \$2.141 for self-serve regular. New York, Chicago, and Boston saw gas prices jump more than 16 cents in the last week.

The price increases in California round out to 18 cents a gallon for the last two weeks, but there were slight variations. Prices rose an average of 18.1 cents a gallon for the week ended Monday, up from a 17.7-cent rise for the week ended Aug. 18, according to the EIA, the statistics arm of the Energy Department.

The cost of crude oil, the principal ingredient in gasoline, has not been a major factor in the latest price run-up at the pump. Oil prices have stayed at \$31 to \$32 a barrel since July.

No price-fixing evidence as gasoline prices rise. Attorney General's Office says it's just market forces

OLYMPIA -- Gas prices that have rocketed past \$2 a gallon in some parts of Washington result from free-market economics, not from an industry effort to artificially increase profits, according to the state Attorney General's Office.

Gary Larson, a spokesman for Attorney General Christine Gregoire, says there's no indication of any violation of state or federal price-fixing laws in the recent price increases.

"There's not much the Attorney General's Office can do," Larson said. "These are market forces at play."

Gas prices set a record in Washington over the past week, reaching an average of \$1.88 for a gallon of regular unleaded, according to a survey by the American Automobile Association.

A downtown Seattle Union 76 station was selling all three grades of gasoline for more than \$2 a gallon yesterday.

Washington gas now costs 14 percent more than the national average of \$1.65, and trails only Hawaii, California, Arizona, Oregon and Nevada in price.

AAA attributed the price increases to high demand and low supply.

A pipeline disruption in Arizona and refinery outages in California this summer contributed to a short supply of gasoline in the West.

Despite improvements, blackout could happen here

By Carrie Peyton Dahlberg -- , August 15, 2003

Nothing fully protects Sacramento, California or the West from an outage that can dart across hundreds of miles in moments, knocking out city after city, the way Thursday's blackouts leapfrogged through the East and Midwest.

"It can always happen here," said Terry Winter, president of the California Independent System Operator.

It did happen here, just seven years ago, when a high-voltage system weakened by repair work and earlier failures was pushed over the brink by a power line sagging into a tree.

After that August Saturday in 1996, when outages stretched from Mexico to Canada, national grid watchdogs ordered improved computer modeling and created new, round-the-clock jobs for regional reliability coordinators.

Such changes were not enough to spare millions from Thursday's blackouts.

Some already have begun speculating that more transmission lines could have helped avert the crisis, and ISO officials warn that more transmission capacity is badly needed in California and the West.

That doesn't change the fact that the wrong set of mechanical failures at the wrong time can simply overwhelm normally sturdy electricity grids, and no realistic amount of planning can totally eliminate the risk, Winter said.

Normally, when trouble strikes one spot on the network of high-voltage lines and power plants called the electric grid, operators can quickly get enough reserve power to cope with the loss, or can isolate the problem from other areas.

But when those procedures fail, trouble cascades outward, at first in fractions of seconds. As special relays on power lines sense changes in frequency or voltage, they begin severing connections. The grid fragments into "islands" of power or darkness. Vast high-voltage interconnections go down. Power plants trip off to avoid damage. Within minutes, the cascade ends and what's left is a shambles.

It can take at least two days, and perhaps up to a week, to restart nuclear plants, and hours or days to restart natural gas ones.

The Sacramento Municipal Utility District, which last year took over control of its own grid, would still be vulnerable to such super outages, but it might have a small advantage in the mopping-up afterward.

If problems elsewhere caused such severe disruptions that SMUD went entirely dark, the district could isolate itself from the grid and be generating some power again within two to four hours.

That's because SMUD's hydroelectric plants can be restarted much more quickly than many other sources of power, said Jim Shetler, assistant general manger for energy supply.

Statewide, ISO officials said, the electric grid is probably a little safer now than it was in 1996, because of improvements in everything from tree trimming to regional coordination, and because more power plants have been built.

More likely than vast blackouts would be smaller problems at well-known weak spots, and those could still mushroom significantly, said Jim Detmers, ISO vice president of grid operations.

"San Francisco could be subjected to an outage that could grow to pick up a very large portion of the Bay Area," he said.

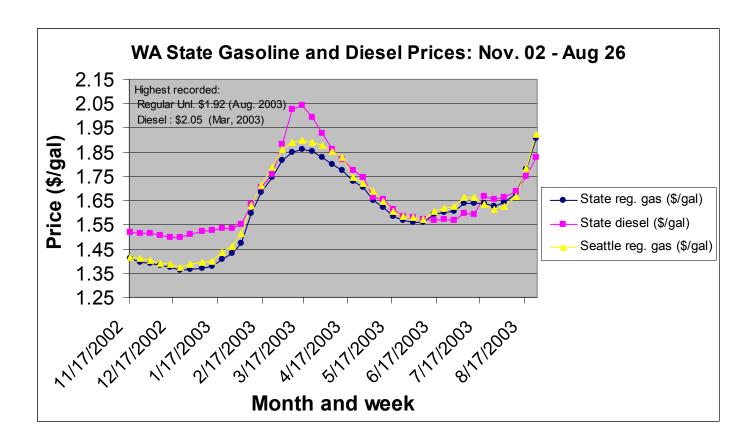
Both Detmers and Winter stressed that the state's most immediate risk is not a monster blackout, but instead what they see as an underbuilt transmission system in dire need of upgrades to cope with new power plants and growing demand for electricity.

The ISO has consistently advocated for more power lines, sometimes running afoul of consumer advocates who argue that they are not yet needed or of some environmentalists who urge smaller, local power plants and reduced demand as better solutions.

The running dialogue on electricity transmission continues at utilities and before state and local regulators, which all have a role in determining when and where new high-voltage lines are built.

Winter predicted that transmission problems could erupt as soon as 2006, probably showing themselves first in higher wholesale electricity costs rather than in any physical grid disturbances.

Fuel prices continue to rise in Washington, setting a new high (state average) price record of 1.92 per gallon. Tight supplies and high demand are blamed for the recent run up in prices. Factors contributing to the price spike include: higher than normal petroleum prices and summer fuel demand, mechanical and ethanol additive blending problems at several California refineries, a minor refinery upset at Anacortes, and the rupture of a gasoline transport line leading from Texas to Phoenix Arizona.



Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 9/02): 40,437 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$34.1-44.2.5 per MWh, Ave. = \$40.1

Approximate change from previous week
"Normal" price range, before 5/00
\$\frac{\$+1.6\$ per MWh
\$20-\$40 per MWh

Petroleum, West Texas Intermediate: \$29.55per barrel (year ago: \$26.87)
Seattle gasoline price (9/02)
\$1.95 per gallon (year ago \$1.49)

• Natural gas, Sumas Hub: \$4.43 per million British Thermal Units (year ago \$2.68)

• Approximate change from last week. Oil: -2.0 per barrel; Nat. gas: -0.04 MMBtu

3. California Electricity Situation

- CA ISO Alert Status
 - o A stage 1 alert (7% reserve margin) was declared on May 28, 2003.
 - o A stage 2 alert (5% reserve margin) was declared on July 10, 2002.
 - o Most recent rotating blackouts: Tuesday, May 8, 2001
- Energy News Headlines from California and the Nation
 - o BPA wholesale rates go up (Seattle PI, Aug. 30)
 - o Gasoline supply worries refiners (WSJ, Aug. 28)
 - o Backward on energy (New York Times, Sept. 2)

4. River and Snowpack Information (Updated Aug. 19, 2003)

- Observed July stream flow at The Dalles: 62.7% of average
- Observed July precipitation above the Dalles: 20% of average
- Observed 2003 snow pack as of May 30 (final for 2003): 89% of average
- The latest forecast of Columbia River stream flows this January through July is 89.3 million acre feet, 83 percent of normal: National Weather Service Northwest River Forecast Center.

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• **State Agencies:** From April to June 2003 electrical usage was 15.3 % less and natural gas usage was 10.9% less compared to the same period in 2000.

6. Winter Load Loss/Reservoir Impacts/Fish (Updated April 21)

- Federal reservoir system storage: 46% full: Precipitation Oct. to date, 93% of normal.
- Estimated winter (2002/03) load loss probability of 1%

7. Power Exchanged: (Sept 2, 2003)

• Average flow of power during the last 30 days

o California (exported to) 3,080 MW o Canada (imported from) 444 MW o Net power export: 2,636 MW

BPA Wholesale Rates To Go Up; Critics Say The Agency Should Be Cutting Them

The Bonneville Power Administration said yesterday it expects wholesale electricity rates to go up 2.2 percent in October, a smaller increase than it had originally predicted but still too much in the eyes of some customers and critics.

The impact of that rate increase on consumers and businesses will depend on what utility serves them, how much of its overall supply that utility buys from Bonneville and under what programs that electricity is purchased.

"Our total Bonneville cost will probably not go up because of our contract mix," said Kevin Clark of Seattle City Light.

Spokesman Neil Neroutsos with the Snohomish County Public Utility District said the utility hasn't yet calculated whether it will need to raise rates.

Snohomish has been among the most critical of the BPA over the need for a rate increase. The utility contends that Bonneville hasn't done enough to cut its costs, and that the BPA's financial condition has improved to the point that the increase is not needed. Snohomish also says that it had been counting on a rate cut, not an increase.

The BPA says it has been able to trim the increase from a projected 15 percent increase last winter to 2.2 percent now because of improved water conditions on the Columbia River system as well as cost-cutting measures.

But it said it still needs a rate increase to ensure that it can make its annual debt payments to the U.S. Treasury.

Snohomish and others maintain that this is a particularly bad time to impose a rate increase of any size, coming on top of a weak Northwest economy and a 46 percent rate increase that resulted from the West Coast energy crunch.

"This federal agency is saying it's more important to build its bank account," Clark said.

The BPA says that not making its Treasury payment would have even more severe impacts if that resulted in the Northwest losing its preferential access to low-cost hydropower. While its cash reserves have been building, it could face a crunch by 2006, the end of the current contract.

Bonneville has said it could cut rates if suits involving it, public and investor-owned utilities are settled. Critics say the litigation isn't directly connected to the rate proposal, and there are other measures the BPA can take to cut rates.

Gasoline Supply Worries Refiners

WSJ, Aug. 28

As prices soar to record levels at U.S. gasoline pumps, a report raises questions about whether the refining industry can keep pace with fuel demand during the next decade.

The report from Rand, a Santa Monica, Calif., policy think tank, says refinery officials question whether there will be enough new capacity to meet growing demand. The officials "seriously doubted" whether there will be enough gasoline imports to fill the expected shortfall beyond 2010, according to the survey, to be released today.

Record gasoline demand and a spate of refinery problems -- some caused by the Aug. 14 blackout -- have pushed retail gasoline prices to their highest levels ever. The average U.S. retail price climbed to \$1.75 a gallon this week, 12 cents higher than last week and two cents more than the previous record, set in March, according to the Department of Energy's Energy Information Administration.

The price increase came amid a tightening market and low gasoline inventories, exacerbated by a pipeline rupture in Arizona, problems at California refineries and the blackout, which temporarily knocked out three Midwest refineries. "There were an incredible number of problems across the country," said Joanne Shore, a senior analyst at the EIA.

Those developments were made more problematic by August demand, which was the highest average for a four-week period ever recorded by the EIA.

Refiners told Rand they expect more price volatility, largely because little spare capacity is available in the U.S. Between 1985 and 2000, average refinery utilization rose to 92% from 78%, and it is expected to stay high for the foreseeable future, Rand said. More gasoline has flowed in from Europe, and that trend is expected to continue in the short term. But it could be upended if more states ban MTBE as a gasoline additive, making it more difficult for European refiners to meet U.S. specifications.

One barrier to adding capacity was eased yesterday when the Environmental Protection Agency exempted refineries from having to install costly clean-air controls when they add certain new equipment. The rule will help increase energy supplies, said Bob Slaughter, president of the National Petrochemical and Refiners Association.

Rand said most refiners have been hesitant to spend money to increase capacity without knowing if the investments will be profitable. Volatile prices and changing regulations -- not demand -- have driven investment decisions, the report says. While big oil companies have been reluctant to expand capacity, independent refiners, such as Valero Energy Corp. of San Antonio, have pledged to continue small capacity expansions.

Backwards on Energy

New York Times Editorial for September 2, 2003

Every president starting with Richard Nixon and the 1973 oil embargo has promised to reduce America's ravenous appetite for oil while investing heavily in new energy sources. Mainly for lack of imagination and political will, all have failed. President Bush is headed in the same direction, for exactly the same reasons. What he and Congress exuberantly describe as their "comprehensive energy plan" is in fact a dreary compendium of subsidies and tax breaks for the coal, oil and gas industries that do nothing to address the problems of global warming or the country's dependence on foreign oil.

These tired ideas are embodied in House and Senate bills awaiting reconciliation in a conference committee that begins work this week. The widespread blackout two weeks ago is said to have given the legislation "new urgency." Not so. The blackout gave new urgency to the need to address the reliability of the electrical transmission system, an issue the bills touch upon. But it cannot possibly be said to have conferred new legitimacy on the cornucopia of industry payoffs that make up the rest of these measures.

Tuesday September 2, 2003

John Dingell, a Michigan Democrat, has the right idea, which is to focus exclusively on the provisions dealing with the reliability of the power grid — and dump the rest. This approach would fasten Congressional attention on a matter of immediate concern: preventing future blackouts. That is a thorny enough issue as it is, given regional and ideological differences in Congress. More important, it would allow Congress to step back from the mess it has created and design something worthwhile. Members of Congress tend to tackle big issues like energy every five or 10 years. So they need to get it right the first time.

There is no shortage of ideas. The bipartisan National Commission on Energy Policy, underwritten by several major foundations, is preparing a detailed strategy aimed at balancing energy and environmental concerns. A second bipartisan group called the Energy Future Coalition, which is loaded with former government officials and academic experts, has already come forward with a half-dozen arresting proposals that make Congress's ideas look all the more tedious.

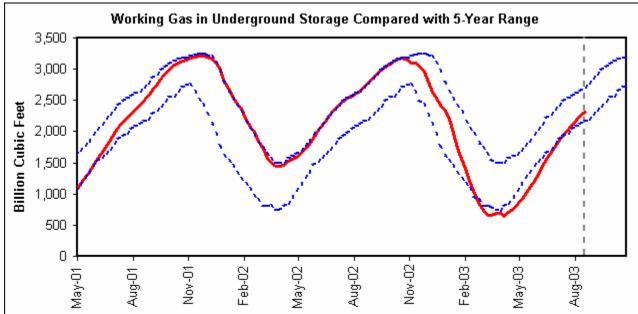
Take, for instance, the matter of improving fuel economy — the quickest and surest way to ease America's oil dependency. The bills in Congress do nothing on this score. The coalition, by contrast, urges a \$10 billion investment in a combination of manufacturing changes and consumer incentives to encourage the production of millions of fuel-efficient hybrid cars. Subsidizing the auto companies to ease their transition to hybrids from S.U.V.'s will be controversial. But the \$10 billion the coalition wants for that purpose is in fact no more than what measures before Congress would lavish on the oil and gas industries, who do not need the money at all.

Similarly, Congress would throw billions at what it calls "clean coal technology," which has been a euphemism over the years for subsidies to the coal and power industries. The coalition starts with the premise that coal is inherently a dirty fuel and that the trick is to find a way to dispose of the harmful pollutants created by coal. It would thus spend heavily on a proven technology called carbon sequestration, a process in which the carbon dioxide produced when coal is burned is injected into the ground.

The coalition has other bold ideas, all expensive and all, to some extent, chancy. But at least they point the country toward a brighter energy future. This cannot be said of the retrograde legislation that Congress seems determined to give us.

Natural Gas Storage Report

As significant natural gas storage additions continue, prices have eased slightly. Limited increases in natural gas production, and savings on the demand side due to high gas prices, have created a small surplus in natural gas production. This has made significant storage additions possible and seems to indicate that sufficient natural gas will likely be available for the winter heating season.



Note: The dashed lines indicate the historical range for the period 1998-2002. The solid red line represents weekly storage volumes. Source: Weekly storage values from March 15, 2002 to the present are from Form EIA-912 "Weekly Underground Natural Gas Storage Report." Values for earlier weeks are from the Historical Weekly Storage Estimates Database.

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2. Electricity, Petroleum and Natural Gas Prices

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Approximate change from previous week
"Normal" price range, before 5/00
\$46.2 per MWh
\$20-\$40 per MWh

• Petroleum, West Texas Intermediate: \$29.07per barrel (year ago: \$28.97)

Seattle gasoline price (9/09)
 Natural gas, Sumas Hub:
 \$1.95 per gallon (year ago \$1.49), see chart on page 8.
 \$4.33 per million British Thermal Units (year ago \$2.68)

• Approximate change from last week. Oil: -.48 per barrel; Nat. gas: -0.10 MMBtu

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 - o Most recent rotating blackouts: Tuesday, May 8, 2001
- Energy News Headlines from California and the Nation
 - o Changes in gas market pushed (LA Times, Sept 9)
 - o Settle energy cases FERC says. (Sacramento Bee, Sept. 4)
 - o From cow pies to kilowatts (Tacoma News Trib. Sept. 2)

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o California (exported to) 3,080 MW o Canada (imported from) 444 MW o Net power export: 2,636 MW

Changes in Gas Market Pushed

Legislators must work to enhance supply and increase competition, Atty. Gen. Lockyer says.

By Elizabeth Douglass, Times Staff Writer

California Atty. Gen. Bill Lockyer on Monday urged legislators to blunt gasoline price increases by creating a fuel reserve, tapping new pipelines or taking other steps that could lead to a more competitive market.

The pressure from the state's top law enforcement official came on the heels of the second major run-up in California gasoline prices this year, and as Lockyer's office released a report suggesting that oil refiners are pocketing big profits.

"The fact is that our market's over-concentrated, we're all paying too much, and we ought to figure out ways to enhance supply and increase competition," Lockyer said.

The report issued Monday concluded that California oil refiners' margins increased 152% between January and March, "with virtually all of the rise representing profit." The price of a gallon of self-serve regular gasoline rose 36% over the same period, hitting a record statewide average of \$2.15 on March 17.

A trade group representing refiners, the Western States Petroleum Assn., questioned the report's methodology. For example, it calculated refinery margins using spot prices for gasoline, which often exceed wholesale prices.

The association said the increase at the pump had its roots in a shortage of refining capacity and higher crude oil prices.

"The attorney general's conclusions contradict those of previous investigations this year as to the causes of market volatility during the period in question," said Jeff Wilson, spokesman for the association. "The California Energy Commission reported that the causes were strictly market-based, as did the Energy Information Administration."

The California Energy Commission's March report laid the blame for high prices on various market conditions. It added: "The possibility exists, nevertheless, that one or more re-fineries could manipulate retail prices by withholding gasoline."

Lockyer conceded Monday that his own investigation into possible price manipulation by oil companies was on the back burner. The real problem, he said, is that seven companies control more than 95% of the state's refining capacity and that few out-of-state refineries are capable of producing California's ultra-clean-burning fuel.

"When you have so few market players," he said, "you don't have to fix prices."

There is widespread agreement among regulators, industry experts, Wall Street analysts and others that California is the refining industry's most profitable market, and analysts are expecting 2003 refining profits to be especially high for the oil companies with plants in the state.

Lockyer called on state lawmakers to pass legislation addressing some of what he said were the market's ills. A strategic gasoline reserve, he argued, would help by providing a backup supply of fuel in the event of refinery disruptions or supply shortages, which push up retail prices.

Lockyer also suggested finding ways to bring more gasoline into the state through pipelines linking Los Angeles and the Texas Gulf Coast, a center of gasoline production.

But the California Energy Commission has already studied — and rejected — several such proposals.

State energy commissioners said no to a proposal to build a new pipeline to connect California directly to the Gulf Coast refineries, saying it would be too expensive and potentially unhelpful. In addition, the commission cast doubt on a plan that would use existing pipelines, along with the new 700-mile Longhorn line between El Paso and Houston, to route fuel to California.

The Longhorn pipeline, expected to go into service soon, will carry fuel to El Paso, where it will connect to pipelines flowing to Tucson and Phoenix. Lockyer has suggested that gasoline refined in Houston could then be sent on to California using a pipeline operated by **Kinder Morgan** that moves gasoline from Los Angeles to Phoenix.

"What we concluded was that the refineries in Texas would not have sufficient excess product of the quality that California needs to make the pipeline feasible," said Pat Perez, the state commission's fuels manager.

It's unclear how the state would force fuel to flow from Texas to California. The existing pipelines are privately owned, operated and paid for, and building a new pipeline would cost an estimated \$1.5 million a mile.

For its part, Kinder Morgan has little interest in reversing the flow of gasoline between Arizona and Southern California.

"We operate our pipeline based on the needs of our customers," which want to move product from Los Angeles to Phoenix, company spokesman Larry Pierce said.

State regulators also shot down the strategic fuel reserve proposal, citing the potential for creating unintended consequences, such as discouraging private companies from increasing storage capacity, Perez said.

California pump prices hit an average of \$2.101 for a gallon of self-serve regular on Aug. 25 before leveling off last week.

Settle energy cases, FERC says

David Whitney -- Bee Washington Bureau September 4, 2003

Federal energy regulators are urging settlement or dismissal of charges against more than two dozen

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energy companies alleged to have participated in market gaming during the California electricity crisis two years ago.

The action comes as the Federal Energy Regulatory Commission is rushing to wrap up its investigation of the electricity crisis that resulted in rolling blackouts and skyrocketing wholesale prices throughout California and the Pacific Northwest.

The 10 proposed settlements came during investigations of more than 60 companies launched in June for instances of market gaming that violated state tariffs, rather than the massive market manipulations such as those by Enron traders that have resulted in criminal convictions and severe sanctions.

Together, the settlements add up to about \$2 million in refunds that will eventually make their way back to California. That did little to please state officials who have consistently argued that the commission refuses to look at the totality of the damage the trading shenanigans heaped on the state.

"We've contended all along that this piecemeal approach to considering these gaming cases is wrong," said Tom Dressler, a spokesman for the California attorney general's office. "Every time a game was played, it impacted the entire market, and every participant benefited."

FERC spokesman Bryan Lee declined to comment on any of the cases because they are still in litigation.

When FERC issued its June order, the commissioners emphasized that many of the allegations could be resolved speedily through negotiated settlement, and that they were encouraging that approach.

"Settlements are in the best interest of the public because they avoid the cost of litigation before the commission and, potentially, before the courts," Lee said.

The settlements still must be approved by an administrative law judge and then by the commission.

Gov. Gray Davis' administration has insisted that California is owed nearly \$9 billion in refunds as a result of widespread market manipulation and gaming by energy traders and utilities.

The energy commission confirmed in its own investigation earlier this year that massive manipulation had occurred, but FERC rules and procedures are likely to limit the amount of refunds the commission eventually orders to roughly a third of what the state is seeking.

Based on information submitted by the state during the FERC investigation, the commission in June ordered some 60 companies to show cause why they should not be required to disgorge profits from their alleged use of schemes to game the California market in violation of state tariffs set by the operator of the state's electricity grid, the California Independent System Operator.

While some 43 of those cases are still pending before a FERC administrative law judge for hearings, commission staff has recommended settlement of 10 of those and the dismissal of an additional 17 cases.

In the various settlements, energy companies made clear that they are not admitting to any gaming or tariff violations, but are agreeing to settle with the agency rather than to proceed to costly trials.

The largest of the proposed settlements were for \$857,000 by Morgan Stanley Capital Group and \$836,000 by Reliant Resources Inc. The other settlements were for relatively trivial amounts, ranging from \$6,300 by the city of Redding to \$75,975 by Aquila Inc.

It is not clear from the filings how these amounts were derived.

But the California Independent System Operator released a report in June detailing some of the corporate profits from tariff violations, and in the case of the \$75,975 paid by Aquila, the settlement is for the amount cited in the report.

The proposed dismissals are based on the commission's staff review of information the parties submitted under the agency's June 25 order.

Among those cases recommended for dismissal are allegations that the Bonneville Power Administration, which sells surplus power from Columbia River hydroelectric dams to California in the winter, engaged in false reporting practices and paper trading to increase its revenues.

But staff investigators concluded that the BPA did not engage in conduct that fit the commission's definitions of false reporting, and that alleged failure to deliver backup power to the state was the result of transmission congestion rather than market gaming.

Commission staff also recommended that gaming charges be dismissed against the Los Angeles Department of Water and Power, saying it couldn't prove that the agency had profited by exporting power out of the state and then reimporting it to get around price caps.

From cow pies to kilowatts

SUSAN GORDON; The News Tribune

An energy consultant has come up with a recipe to cook Enumclaw's cow pies into kilowatts and get rid of a smelly pollution problem in the process.

But is profit from poop a fairy tale or a sure thing? And will the \$7.6 million project attract an investor?

Answers to those questions could be crucial to the survival of many small dairies that give the Enumclaw Plateau its pastoral atmosphere, farmers said.

The proposed waste-to-energy plant would convert manure from more than 6,000 milk cows into electricity for 800 homes, with organic potting soil and irrigation water as byproducts. As many as 15 dairies could truck manure to the proposed plant from farms within a 2 1/2-mile radius.

"There's enough animals and enough manure to make this a community operation," said Janet Baker, 70, whose husband, Bob, 72, grew up on the family farm where they milk 350 Jersey cows.

King County, Puget Sound Energy, Seattle City Light and others commissioned the \$25,000 study to assist the plateau's 30 small dairy farms and help solve related environmental problems.

In 1979, King County voters who wanted to preserve the region's agricultural heritage agreed to buy development rights from farmers who wanted to stay in business. Many on the plateau took advantage of the deal.

But some Enumclaw-area farmers say they now need additional relief. Already set back by record low milk prices and competition from larger, lower-cost producers, they fear increasingly complicated government rules regarding manure could ruin their prospects.

"We're all hurting. Everybody's hurting," said Troy Wallin, 34, a second-generation Enumclaw farmer with 200 milkers on a farm next to the Auburn-Enumclaw Highway.

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Suburban-style homes surround his 60 acres. He believes that additional cows could improve his profits, but he doesn't have a place to dispose of more cow dung. For Wallin, the waste-to-energy project looks like salvation. "If milk prices stay low, it's very critical for me," he said.

Paul Gwerder, 42, who has 400 milkers, also hopes a waste-to-energy plant is built. He has four children and is a third-generation King County farmer. "I don't see a fourth generation happening unless something like this comes along to help us manage our manure," he said.

Burt Tribble, a Kansas economist and former hog farmer, wrote the feasibility report. Tribble, who does business as Environmental Resource Recovery Group, is convinced the \$7.6 million Enumclaw project will pencil out if given the right incentives, including the kind of federal tax credits now given to wind farms.

Tribble's plan depends on technology that was pioneered 30 years ago but so far has not been widely adopted, in part because of cost.

The concept is simple. As manure breaks down, it naturally discharges methane gas into the air. The proposed Enumclaw plant would use what experts call a digester to speed up the decomposition process.

The captured methane would fuel a 1.2-megawatt generator and produce the kind of renewable or "green" power that environmentally oriented consumers willingly pay premium prices for, Tribble and others said.

Nationwide, 31 dairies, hog farms and egg plants now employ digester systems, according to the Environmental Protection Agency. Of those, 23 feature generators that produce electricity.

Those familiar with so-called biogas digesters believe the Enumclaw project has merit.

"I don't think the technology is a limiting factor. We can do this in a heartbeat. It's the return on investment that's the quandary," said Jay Gordon, a dairy farmer from Elma, Grays Harbor County, who also is executive director of the Washington State Dairy Federation.

Similar digesters also have been proposed to assist dairy farmers near Monroe, in Snohomish County; Lynden, Whatcom County; and Sunnyside, Yakima County. But none of the other Washington proposals has been as thoroughly analyzed as the Enumclaw digester, Gordon said.

One of the most appealing aspects of the Enumclaw proposal - as environmental advocates view it - is that it would prevent methane from leaching into the atmosphere.

Methane is among the most damaging of the so-called greenhouse gases that most atmospheric scientists blame for global warming. Experts calculate that methane is 23 times more dangerous than carbon dioxide, for example.

Whoever builds the Enumclaw plant could bring in additional revenue by selling credit for the amount of methane diverted, experts said.

Seattle City Light is one potential investor. The utility has made a commitment to offset its use of fossil fuels with renewable energy alternatives, such as manure power, said Doug Howell, who worked on the project for Seattle City Light.

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In addition, the plant would yield another marketable product: organic potting soil that could be sold to nurseries as a peat-moss substitute.

Tribble proposes to incorporate a filtration system that would concentrate other wastes into a liquid farm fertilizer. The plant also would discharge water clean enough to recycle for irrigation.

Much of the project's appeal springs from its associated benefits, such as clean water. It would be nice if society put a dollar value on that, said Rob Harmon, vice president and director of renewable energy programs for the Bonneville Environmental Foundation. The foundation is a nonprofit entity that markets renewable energy and supports watershed restoration.

Harmon's group helped pay for the digester study. He and others are now scrutinizing the details of Tribble's proposed business plan.

"Right now we're in due diligence to decide whether we are comfortable with the numbers," he said.

Puget Sound Energy also contributed to the study. Mike Richardson, manager of renewable and customer programs, said utility officials could buy the plant's electricity. Whether Puget would invest in the \$7.6 million project hasn't been decided.

"We will stay involved in it. We will spend some time, at least," Richardson said.

Enumclaw farmers said they can't bankroll the plant, and some insist they could not even afford to truck their manure to the still-unidentified site.

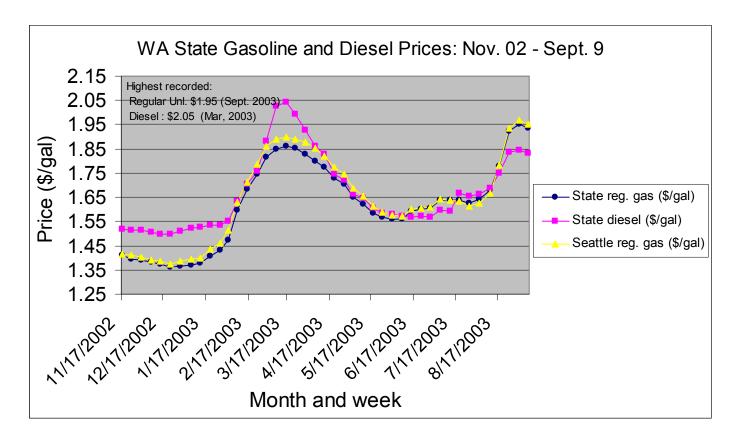
One financing option is a public-private partnership, said Rick Reinlasoder, livestock program specialist who works for King County. "The numbers are promising," he said.

King County Executive Ron Sims has praised the Enumclaw study. Reinlasoder and other county employees continue to lay the groundwork for future construction, which is likely to be years away.

Meanwhile, manure management remains a chore at dairies around Enumclaw. Twice daily - after each milking - on the Baker farm, herdsman Tom Rockhill uses a tractor-mounted blade to scrape tons of poop into a 17,000-gallon concrete tank under the barnyard. A pump sucks the foul-smelling muck from the tank into a 3.5 million gallon lagoon. The lagoon holds the decomposing dung until it can be safely sprayed on farm fields.

"While we have been fortunate to have good neighbors, odor can be an issue," Bob Baker said, adding that a digester would reduce the stench considerably.

Gasoline prices peaked last week at just over 1.95 per gallon (state average) and have slowly started to retreat, dropping 2 cents per gallon in the last week. Diesel prices remained well below their March 2003 peak of 2.05 per gallon.



Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 9/16): 40,333 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$37.1-44.1 per MWh, Ave. = \$42.9

Approximate change from previous week
 "Normal" price range, before 5/00
 \$\frac{4}{20}\$-\$\frac{4}{9}\$ per MWh

Petroleum, West Texas Intermediate: \$28.13 per barrel (year ago: \$28.97)
Seattle gasoline price (9/15)
\$1.90 per gallon (year ago \$1.49),

• Natural gas, Sumas Hub: \$4.35 per million British Thermal Units (year ago \$2.68)

• Approximate change from last week. Oil: -.94 per barrel; Nat. gas: +.02 MMBtu

3. California Electricity Situation

- CA ISO Alert Status
 - o A stage 1 alert (7% reserve margin) was declared on May 28, 2003.
 - o A stage 2 alert (5% reserve margin) was declared on July 10, 2002.
 - o Most recent rotating blackouts: Tuesday, May 8, 2001
- Energy News Headlines from California and the Nation
 - o Expert: NW power grid safe, but not foolproof (Seattle Times, Sept 11)
 - o Energy pals in high places. (LA Times, Sept. 15)
 - o Profit spike by refiners is at issue (Sacramento Bee, Sept. 9)
 - o Cinergy pledges 5 percent cut (WSJ, Sept. 10)

4. River and Snowpack Information (Updated Aug. 19, 2003)

- Observed July stream flow at The Dalles: 62.7% of average
- Observed July precipitation above the Dalles: 20% of average
- The latest forecast of Columbia River stream flows this January through July is 89.3 million acre feet, 83 percent of normal: National Weather Service Northwest River Forecast Center.

5. Energy Conservation Achievement (Updated Aug. 19, 2003)

• **State Agencies:** From April to June 2003 electrical usage was 15.3 % less and natural gas usage was 10.9% less compared to the same period in 2000.

6. Winter Load Loss/Reservoir Impacts/Fish (Updated April 21)

- Federal reservoir system storage: 46% full: Precipitation Oct. to date, 93% of normal.
- Estimated winter (2002/03) load loss probability of 1%

7. Power Exchanged: (Sept 16, 2003)

• Average flow of power during the last 30 days

o California (exported to) 2,808 MW o Canada (imported from) 463 MW o Net power export: 2,345 MW

Expert: NW power grid safe but not foolproof

By John K. Wiley, A.P., Seattle Times, Sept. 11

After a power outage that darkened a swath of the Northeast and upper Midwest last month, regional power planners wondered if a similar "cascading event" could happen in the West.

It could, but the Western electricity grid has several new safeguards in place that may help it respond to a major outage, a transmission expert told the Northwest Power and Conservation Council yesterday.

Jerry Rust, director of the Northwest Power Pool, a Portland-based association of major utilities in the northwestern United States, British Columbia and Alberta, said a more-reliable system is possible, but at a price.

"Even with all the safeguards ... we never can say 'never,' "Rust told the council, formerly known as the Northwest Power Planning Council. "We cannot make it 100 percent foolproof."

The cause of the East Coast blackout is still being investigated, but Rust said it likely was caused by a number of failures across a transmission grid that has eight separate "reliability councils."

The electricity grid covering the West is interconnected by major transmission lines between the Northwest and California and the Southwest. Differences in generating plants may also benefit the West, he said.

"In the Northwest, we're quite lucky, because hydropower is very easy to bring back online" compared to coal-fired and nuclear generation plants in the East, Rust said.

The Eastern power grid is thermally limited, meaning transmission lines are prone to overheating when overloaded, Rust said. But generating stations there are generally closer to load centers, he said.

In the West, generating stations are typically a long distance from load centers, with long transmission lines that have the potential for excessive variations in voltage, he said.

The load imbalances must be corrected quickly, or the entire system could collapse, Rust said.

The Western grid has safety-net programs that are intended to provide relief if there is an "extreme event," or major outage, Rust said.

The system worked in October 2002, when smoke from a wildfire burning beneath high-voltage transmission lines in California caused them to arc, tripping circuit-breakers handling 3,000 megawatts, Rust said. Quick action prevented a major outage, and the system was restored to near normal in just over 15 minutes, he said.

A similar event Aug. 16, 1996, disrupted power for as long as nine hours to about 7.5 million people in the West, mostly in Northern California. It resulted in operational changes that made extended outages less likely, Rust said.

The National Commission on Energy Policy recently recommended new investment incentives and a bigger role for federal regulators to make the nation's "seriously overloaded" power system more reliable.

The commission, which said competitive electricity markets have failed consumers, recommended empowering the Federal Energy Regulatory Commission to mandate grid-reliability standards and impose higher, uniform charges to pay for investments in transmission lines.

The Bonneville Power Administration is spending \$700 million to build new high-voltage transmission lines in the Seattle area and from Spokane to Grand Coulee Dam — the first new major transmission lines since 1987.

Energy's Pals in High Places

LA Times, Sept 15

The energy industry's multibillion-dollar wish list survives intact in the national energy act being hashed out in a congressional conference committee. The legislation remains the product of closed-door meetings two years ago between energy industry executives and Vice President Dick Cheney, a former oilman. Though the Senate in July managed to pass a slightly more moderate bill that Democrats had backed, bipartisan activity ended the moment Sen. Pete V. Domenici (R-N.M.) and Rep. W.J. "Billy" Tauzin (R-La.) loaded their House-Senate conference committee with friends of the energy industry.

Domenici and Tauzin shamelessly link oil drilling in the Alaskan wilderness to such things as keeping the lights on in New York, even though the blackout was a result of a neglected transmission system, not lack of power. They and their allies continue to push for subsidies to oil states, coal states and farm states that grow corn used to produce the gasoline additive ethanol. Conspicuously absent is any mention of tougher automobile fuel efficiency standards that would dramatically reduce energy consumption. Domenici also would give utilities loan guarantees to help them build nuclear plants, even though the industry hasn't figured out how to dispose of aging, outdated power reactors and their radioactive waste.

Congress, if it had any intestinal fortitude, would drop this giveaway package and do the regulatory tightening that would prevent more blackouts and increase energy independence. Start by granting real regulatory power to the North American Electric Reliability Council. The little-known organization now relies on voluntary compliance to keep electricity flowing on the overloaded system. The council is not much of a club in an industry where ever-larger power producers, transmission line operators and energy traders constantly battle for a competitive edge. Congress also must create regional organizations to deal with the increasingly interstate nature of electric transmission.

Then Congress should invite testimony from real energy experts not beholden to the energy industry and develop a legislative package that helps the nation.

There are plenty of people with solid ideas, starting with members of the Energy Future Coalition and the National Commission on Energy Policy. These nonprofit organizations draw their members from across the political spectrum, and their proposals — including incentives to build fuel-efficient cars and innovative ways to strengthen the electric grid — deserve legislative respect even though

they aren't accompanied by obscenely large campaign contributions.

The current energy plan is largely a pile of favors to powerful supporters of the Bush administration. The nation deserves better.

Profit spike by refiners is at issue

By Dale Kasler, September 9, 2003

California oil refiners' per-gallon profits more than doubled when retail gasoline prices hit record highs in March, according to a report issued Monday by Attorney General Bill Lockyer.

The report said refiners' markups on an average gallon of gas went from 27.6 cents in January to 69.6 cents in March. Because refiners' costs "increased minimally, if at all ... the increase is almost solely profit," the report said.

Industry officials acknowledged that profits rose last spring but said they were a product of market forces. They also noted that federal and state investigations already have concluded that the big price spike in California was largely the result of higher oil prices, refiners' mechanical problems and a troubled transition to ethanol-based fuels.

Lockyer assessed no blame in his report. But in a prepared statement he said the higher profits "raise legitimate questions about whether this state's drivers and businesses are getting gouged."

But industry officials like to compare the situation to agriculture, where one farmer's prices and profits jump if other farmers' crops fail. They said production problems at some refineries last winter allowed other refiners to raise prices legitimately. In some cases refiners were selling excess supplies to competitors who were desperately short of gasoline, yielding high markups.

"I'm not in business to help my competitors; I'm in business to help my shareholders," said David Hackett, a former oil company executive who's now an industry consultant in Irvine.

Spokeswoman Anita Mangels of the Western States Petroleum Association, the refiners' trade group, called Lockyer's report "another speculative allegation that will go nowhere."

Severin Borenstein, director of the University of California Energy Institute, said there's no question that refiners made more money when prices shot up. What isn't clear is whether any companies withheld supplies to manipulate prices. "It may just be that it was a tight market and the price went up," Borenstein said.

The report covered the period between January and March, when a gallon of self-serve regular statewide went from an average of \$1.57 in January to a peak of \$2.15 in March, according to the California Energy Commission.

The report didn't cover the latest price spike, which peaked in late August at \$2.10 and prompted Lt. Gov. Cruz Bustamante, who's running for governor in the Oct. 7 recall election, to propose state regulation of gas prices.

The California Energy Commission and U.S. Energy Information Administration, which conducted separate investigations, blamed the March price spikes on a variety of factors: higher oil prices on

the eve of the war against Iraq, refinery production problems and the struggles some refiners experienced in converting to ethanol.

Some industry experts believe California's problems lie in its tough clean-fuel specifications. Because no other states use California's formula, it's difficult to import supplies from out of state if a refinery suffers a production problem. That leaves California vulnerable to price spikes.

"Any market impacts that arise are going to be felt much more quickly in California," Mangels said. "We have an incredibly precarious supply-and-demand balance."

Hackett noted that various production glitches last winter prompted some refiners to scramble for supplies all over the world, causing prices to rise.

Cinergy Pledges 5% Emissions Cut

Wall Street Journal, Sept. 10

One of the nation's largest coal-fired electric utilities has pledged to cut its emissions of carbon dioxide and other so-called greenhouse gases by 5%, the first of four power companies participating in a Bush administration program to announce specific voluntary reductions to help combat global warming.

Cinergy Corp., which expects to expand its sales of electricity by 2% annually, will spend about \$21 million to find ways to reach its reduction target in the years 2010 to 2012, officials said. Two-thirds of the money will be directed at such things as upgrading the efficiency of the Cincinnati-based company's current plants or incentive programs that reduce consumer demands during hot summer days.

"We'll let the economics dictate where the cheapest reductions are," said Cinergy Chairman and Chief Executive James E. Rogers, who noted that the company may also invest in "offsets," including agriculture and forestry projects that tend to reduce atmospheric levels of carbon dioxide and other gases. Environmental Defense, a nonprofit environmental group in New York, will serve as an adviser to the company. An as-yet unnamed independent company will serve as auditor of the reduction project, Mr. Rogers said.

Fred Krupp, president of Environmental Defense, hailed Cinergy's move "as the type of corporate leadership that's going to help break the paralysis in Washington on this issue." The Senate will vote on a mandatory national greenhouse-gas reduction program this fall that is being prepared by Sens. John McCain (R., Ariz.) and Joseph Lieberman (D., Conn.). While the terms of the current McCain-Lieberman regulatory program are still being drafted, an earlier version called for industries to reduce emissions to 2000 levels by the year 2010. Mr. Krupp said Cinergy's move may give the legislation a push by "showing you can generate a lot of electricity profitably and still protect the planet."

Environmental Protection Agency officials say 11 U.S. companies working in the agency's voluntary program have announced reduction targets and another 35 are measuring their carbon-dioxide output and doing other preparatory research needed before they can announce a voluntary reduction plan. So far the leader appears to be DuPont Co., which says it has cut its world-wide emissions of greenhouse gases by 68% and U.S. levels by about 40%, based on 1990 levels.

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Paul V. Tebo, a DuPont vice president, estimates the company has saved at least \$2 billion in energy costs since 1991. Part of the company's effort to reduce emissions of greenhouse gases, he explained, is to hold Dupont's annual energy consumption to 1990 levels.

The first U.S. utility to announce greenhouse gas reductions was New Orleans's Entergy, which announced in May 2001 that it would hold carbon-dioxide emissions at 2000 levels through 2005 despite projected market growth. The company, which isn't in the EPA's voluntary program, recently announced that it has initiated 38 programs, ranging from installing more-efficient boilers to planting trees to meet its target.

Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 9/23): 41,709 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$31.1-43.1 per MWh, Ave. = \$38.7

Approximate change from previous week
 "Normal" price range, before 5/00
 \$-4.2 per MWh
 \$20-\$40 per MWh

Petroleum, West Texas Intermediate: \$26.96 per barrel (year ago: \$28.97)
Seattle gasoline price (9/22)
\$1.85 per gallon (year ago \$1.47),

• Natural gas, Sumas Hub: \$4.14 per million British Thermal Units (year ago \$2.68)

Approximate change from last week.
 Oil: -1.17 per barrel; Nat. gas: -.21 MMBtu

3. California Electricity Situation

- CA ISO Alert Status
 - o A stage 1 alert (7% reserve margin) was declared on May 28, 2003.
 - o A stage 2 alert (5% reserve margin) was declared on July 10, 2002.
 - o Most recent rotating blackouts: Tuesday, May 8, 2001
- Energy News Headlines from California and the Nation
 - o Wind farms produce power from thin air (Seattle PI, Sept 18)
 - o 3 western governors unite to fight global warming. (Seattle PI, Sept. 23)

4. River and Snowpack Information (Updated Sept. 19, 2003)

- Observed August stream flow at The Dalles: 66.7% of average
- Observed August precipitation above the Dalles: 56% of average

5. Energy Conservation Achievement (Updated Aug. 19, 2003)

• **State Agencies:** From April to June 2003 electrical usage was 15.3 % less and natural gas usage was 10.9% less compared to the same period in 2000.

6. Power Exchanged: (Sept 16, 2003)

• Average flow of power during the last 30 days

o California (exported to) 2,808 MW o Canada (imported from) 463 MW o Net power export: 2,345 MW

Wind farms produce power from thin air

Proponents see clean energy; foes see marred hills, high utility rates

By Lisa Stiffler

The towering windmills, half as tall as the Space Needle, are sleek and otherworldly.

Thirty-seven of them line a golden hillside near here, whistling softly as their huge white blades slice the air. Two more are being erected this month at the Nine Canyon wind farm; another 10 are expected to be added later this year.

Today, 310 turbine-driving windmills are whirling in Washington and plans are being made to plug in hundreds more. The state ranks fifth nationally for wind-energy production, according to a trade organization.

Environmental groups have thrown their support behind the projects. Utilities catering to pollution-conscious customers and spooked over costly spikes in natural-gas prices are increasingly seeking out "green energy." And farmers are cashing in -- leasing chunks of arid, windswept fields to power producers.

But the state's wind farms are still whipping up controversy.

Some residents say the giant pinwheels are an aesthetic mess, marring unspoiled hillsides. They worry property values will drop and birds will be sliced and diced. Others object to the tax breaks and higher power rates charged by the wind farms.

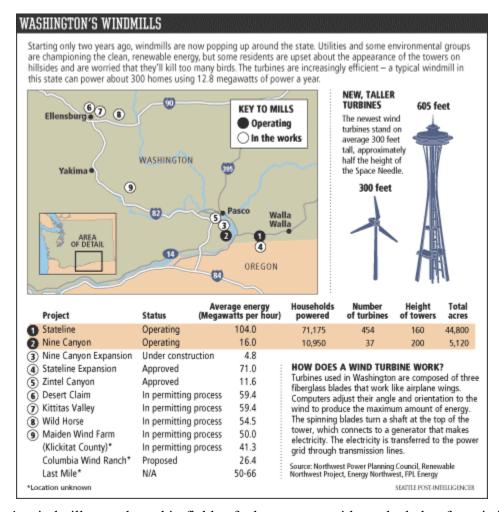
The debate over wind power has divided residents in Kittitas County, where Zilkha Renewable Energy wants to erect 240 turbines in the next couple of years.

"I love 'em," said Bernice Best, who lives on a ranch in Ellensburg. "I know exactly where I stand on this. When we moved to the Kittitas Valley in 1990, I wondered why no one had taken advantage of the wind. It's clean. It's free."

Best has driven out to the wind farms already operating on hills above the Columbia River. Near the Nine Canyon project is the massive Stateline Wind Energy Center, with 454 turbines stretching from Walla Walla County to Umatilla County, Ore.

There are no plans to build wind farms on the west side of the Cascades, where wind speeds tend not to reach the desired average: 16 mph. The gusty hot spots are along the Columbia Gorge or east of Snoqualmie Pass.

The Washington coast also has strong winds, but industry experts suspect that public objections to erecting rows of windmills there would be insurmountable.



Nine Canyon's windmills are planted in fields of wheat grown without the help of any irrigation save scant rainfall. The farmers are divvying up about \$70,000 a year for leasing 3,000 acres.

The steel towers run 200 feet high, topped by three blades -- each the length of a Boeing 747's wing. They make surprisingly little noise.

"I was just totally impressed," Best said of her visit to the farm. "They just seemed so graceful."

Environmental groups are similarly enthralled. The Sierra Club, Washington Public Interest Research Group and non-profits working to curb global warming are wind-power proponents, while Audubon Washington is cautiously supportive.

Audubon officials are worried that project approvals don't consider the cumulative effect of multiple wind farms.

The big picture needs to be considered "so that we don't find ourselves in the same situation as we have with salmon," said policy director Nina Carter. Dams were built without looking at the overall impact on fish, she said, and now some environmental groups are calling for some to be removed.

The turbines are becoming increasingly efficient, power producers say, which means that they're increasingly safer for birds because they can spin more slowly and fewer are needed to generate the same amount of energy.

Each of the windmills at Nine Canyon, based on normal wind conditions, produces enough electricity to serve nearly 300 homes.

"This is a rapidly evolving technology," said Chris Taylor, manager of the Zilkha project in Kittitas. "It's akin to the computer industry."

Compared with prior models, today's windmills are bigger, with an improved blade design that captures more wind. They're also better built, so they break down less frequently.

While the energy crisis that began in 2000 gave a boost to the expansion of wind power, it's still just a blip in the Northwest's overall energy production. It would take about 2,900 new windmills in Washington and Oregon for wind power to account for even 10 percent of the pie, which remains dominated by energy generated from dams.

Wind power generally is still more expensive than other forms of energy, like hydro and natural gas, although recent increases in natural-gas prices has narrowed that gap substantially. A tax credit from the federal government helps make it more competitive, but the law providing that break is set to expire at the end of this year. The credit has been renewed in the past, but only for two-year chunks, making long-term planning difficult.

Supporters of wind power are hopeful that the renewal will be approved and perhaps extended to cover three years.

At the state level, there has been a push to create a law requiring utilities to have green energy make up a set percentage of their power lineup, but it hasn't gotten far. California, Texas and others have passed similar laws.

It's just that kind of government support and prodding that irks John Winnett, who lives in Hidden Valley, near Cle Elum.

"The only reason they exist is through tax subsidies and inflated rates to consumers," Winnett said of wind farms.

Winnett and others are challenging the Zilkha project, which is still getting permits. He said that the monetary incentives are his biggest concern, but he's also worried that hundreds of windmills will change the "flavor" of the area's rural landscape and lower property values.

"It will no longer be Hidden Valley 'the beautiful hills,' " he said. "It's going to be 'over there where they have all the wind towers and the flashing lights at night.' "

Wind-power supporters reject complaints about tax breaks.

"Every form of energy, whether it's natural gas energy or nukes, has grandfathered-in subsidies," said Jan Johnson, spokeswoman for PPM Energy, which markets the power produced at Stateline.

Wind-power supporters are optimistic that demand for their product will keep growing. Since last year, Washington utilities have been required to allow customers to pay higher rates to support green energy, but the program is optional and so participation is limited. Solar energy is also produced in the state, but at even smaller amounts than wind power. PacifiCorp, a private utility and power company that operates in Yakima and Walla Walla as Pacific Power, will send out a request for proposals for a big chunk of renewable power by the end of the year.

The Bonneville Environmental Foundation, a non-profit supporting development of renewable energy, has helped secure the rights to 20,000 acres of land on the Columbia River in Klickitat County. Officials estimate that a wind farm there could power 48,000 homes.

"There's sort of been a critical mass building up around this issue and there's pent-up demand," said Rob Harmon, vice president of the Portland-based foundation.

3 Western governors unite to fight global warming Coordination planned to cut emissions

The governors of California, Washington and Oregon, accusing the Bush administration of "footdragging" in the fight against global warming, announced yesterday they plan to develop a joint strategy to reduce pollution.

California Gov. Gray Davis and Washington Gov. Gary Locke, joined by environmental activists, unveiled the pact at a state park offering smog-shrouded views of Los Angeles. Oregon Gov. Ted Kulongoski, who was unable to attend, endorsed the plan in a statement.

The three Democrats said they would work to check global warming through coordinated actions that include buying fuel-efficient vehicles, developing renewable sources of energy and creating standardized methods to account for emissions.

Davis said the agreement was necessary because President Bush refused to act more aggressively to cut emissions.

"Unfortunately, the Bush administration is still in denial on global warming. They have their head in the Texas sand; they're foot-dragging. They refuse to believe it's a problem," Davis said. "My message today is if Washington, D.C., will not lead, then the West Coast of the United States will lead on global warming."

Locke, who said the three states account for nearly 2 percent of global emissions, warned that climate change could wreak havoc on natural habitat by melting snowpacks and sparking forest fires.

"Other countries are paying attention and acting," Locke said. "The current administration is paying only lip service and doing little to address global warming."

Dana Perino, a spokeswoman for the White House Council on Environmental Quality, dismissed such criticism.

She cited the administration's proposals to give tax incentives to consumers who use alternative energy and buy hybrid vehicles, along with a plan that calls for the amount of greenhouse gases released as a percentage of economic growth to be reduced by 18 percent by 2012.

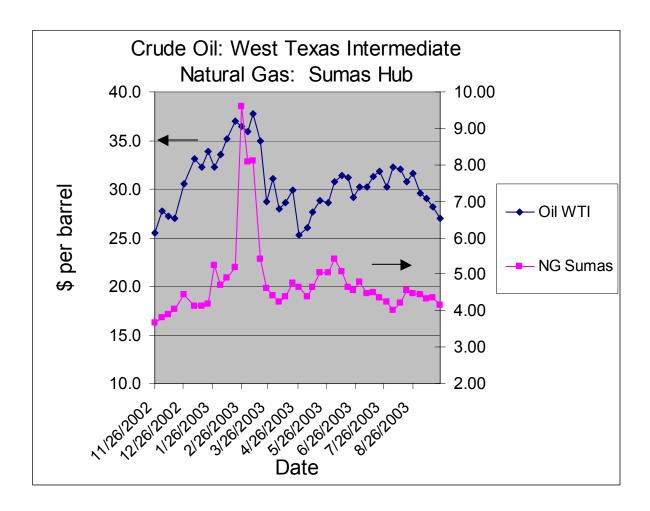
"The facts surpass political rhetoric. We have an aggressive and comprehensive global climate change set of initiatives that go further and deeper than his proposals today," Perino said.

The three states hope to:

- Use their buying power to obtain fuel-efficient vehicles.
- Reduce diesel fuel emissions from ships and trucks, including by creating a network of emission-free truck stops along Interstate 5.
- Promote more renewable energy.
- Develop uniform efficiency standards.
- Work on better measurement and reporting of greenhouse gas emissions and climate change.

The action was welcomed by environmentalists.

Petroleum prices have declined sharply over the last month, while natural gas prices continue to gradually decline as the winter heating season approaches.



Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 10/14): 41,022 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$38.0-43.0 per MWh, Ave. = \$40

Approximate change from previous week
 "Normal" price range, before 5/00
 \$\frac{\$+1.3\$ per MWh
 \$20-\$40 per MWh

Petroleum, West Texas Intermediate: \$28.40 per barrel (year ago: \$28.97)
Seattle gasoline price (9/29)
\$1.80 per gallon (year ago \$1.45),

• Natural gas, Sumas Hub: \$4.00 per million British Thermal Units (year ago \$2.68)

• Approximate change from last week. Oil: +1.44 per barrel; Nat. gas: -.14 MMBtu

3. California Electricity Situation

- CA ISO Alert Status
 - o A stage 1 alert (7% reserve margin) was declared on May 28, 2003.
 - o A stage 2 alert (5% reserve margin) was declared on July 10, 2002.
 - o Most recent rotating blackouts: Tuesday, May 8, 2001
- Energy News Headlines from California and the Nation
 - o Task force warns of natural gas crunch (New York Times, Sept 30)
 - o Legislators dispute renewable fuels. (New York Times, Sept. 30)

4. River and Snowpack Information (Updated Sept. 19, 2003)

- Observed August stream flow at The Dalles: 66.7% of average
- Observed August precipitation above the Dalles: 56% of average

5. Energy Conservation Achievement (Updated Aug. 19, 2003)

• **State Agencies:** From April to June 2003 electrical usage was 15.3 % less and natural gas usage was 10.9% less compared to the same period in 2000.

6. Power Exchanged: (Oct. 14, 2003)

• Average flow of power during the last 30 days

o California (exported to) 2,245 MW o Canada (exported from) 137 MW o Net power export: 2,382 MW

Task Force Warns of Natural Gas Crunch

Natural gas shortages and price spikes, if not dealt with in the years ahead, could threaten Americans' livelihoods and quality of life and force energy-dependent industries and jobs oversees, a Republican congressional task force concludes.

The group of House GOP lawmakers was issuing a report Tuesday that paints a sobering picture of economic tough times ahead if ``the growing imbalance between the supply and demand for natural gas" is not corrected.

The report, which focuses heavily on the need for increased production and gives short shrift to conservation, is being released as lawmakers move toward approval of the first overhaul of America's energy agenda in a decade.

The conclusions of the GOP task force, which was assembled by House Speaker Dennis Hastert in July, are certain to come under criticism from Democrats who have maintained that congressional Republicans are intent on promoting a political agenda of drilling in environmentally sensitive areas now off limits, including much of U.S. coastal waters.

While the report does not address specifically the need to lift drilling bans that now cover most of U.S. Outer Continental Shelf, it makes clear that current limits on exploration and development should be re-examined.

The GOP task force concludes that fixing the natural gas supply problem will require measures beyond what are being considered in the pending energy legislation, including lifting some of the development restrictions now in place, according to a summary document and sources familiar with the entire report.

The report criticizes years of accepting ``schizophrenic policies" that on the one hand promoted natural gas use because of its environmental benefits and on the other restrict its development because of environmental concerns.

Fixing the problem will be a long-term job, the task force says, reflecting a similar conclusion in a report issued last week by a group of oil and gas industry executives who advise the Energy Department.

"There are few viable options available to us in the short term to forestall inevitable economic pain for millions of Americans," Reps. Billy Tauzin of Louisiana and Richard Pombo of California, the co-chairs of the task force, write in a cover letter to the report.

The GOP group urges streamlining of federal oil and gas lease programs and an easing of the permit process, and calls for programs that promote North American gas development, including Alaska's massive gas resources.

``Our findings are stark," Tauzin and Pombo write. ``The United States is on trajectory towards an energy future which threatens Americans' livelihood and quality of life, and puts at peril our national manufacturing and industrial base."

"Without radical correction the present course will have far-reaching impacts on our economy (including) ... a massive outflow of energy-dependent industries and the jobs they support," they write.

Hastert had directed a review of what he called an impending natural gas crisis so that Congress could respond with legislation. Last spring and early summer gas was selling at more than \$6 a thousand cubic feet at wholesale and the Energy Department warned that gas inventories were at dangerously low levels. Shortages were possible this winter, the department said.

Since then, gas supplies have increased to near normal levels and prices have dropped to the \$4.50 range. But the volatility of the natural gas markets was demonstrated again on Monday as an unusually cold day caused the prices for gas to be delivered in December and January to jump to as much as \$5.30 a thousand cubic feet.

Last week a report issued by the National Petroleum Council, a group that advises the Energy Department, said gas prices could range from \$5 to \$7 a thousand cubic feet for years to come. It also warned of supply problems if there is not more production in new areas, but said for the short term the only answer is for people to use less of the fuel.

Legislators Dispute Renewable Fuels

Disputes over whether power companies should be made to use renewable fuels to make electricity and about liability protection for makers of a water-contaminating gasoline additive are complicating negotiations over a far-reaching energy bill.

Fifty-three senators, including eight Republicans, urged Monday that electric utilities be required to make at least 10 percent of their power from solar panels, wind turbines, biomass, geothermal energy and other non-hydro renewable sources.

A Republican partial draft of the legislation left out such a requirement although it had been in a Senate-passed bill. Aides to Sen. Pete Domenici, R-N.M., energy conference chairman, said there are no plans to put it into the bill being worked out with the House.

"A majority of the House (negotiators) are strongly opposed to it," said an aide to the senator. Most of the Republicans, including Domenici, involved in the energy talks, also oppose such a provision. Democrats could try to get it in the final bill, but they are likely to be overruled by Republicans, who hold a majority in the talks.

Rep. Billy Tauzin, R-La., who is leading the House negotiators, said the renewable fuels requirement would ``penalize consumers in my state" and other areas where renewable fuel sources are not easily available. ``My guess is it's not going to be in the (energy conference) report," he told reporters.

Tauzin said ``we're very close" to a compromise that would resolve the dispute between the House and Senate over the future of MTBE, a petroleum-based gasoline additive that many senators want banned because it has been found to contaminate groundwater from California to New England.

But some key House Republicans, including Majority Leader Tom DeLay of Texas, not only oppose to a ban but want MTBE manufacturers to be protected from any lawsuits from the chemical leaking into water supplies. The industry has pushed hard for the legal protection.

DeLay has sought a meeting with Domenici to discuss the issue, but Marnie Funk, a spokeswoman for the senator, said late Monday that no such meeting is on Domenici's schedule. DeLay, whose district includes MTBE manufacturers, is not part of the energy conference and has been accused by Democrats of trying to inject himself into the talks.

Tuesday September 30, 2003

Environmentalists and many senators from states where there has been MTBE contamination fear a waiver would let the MTBE makers off the hook. The industry says the waiver would be limited and cover only product defect cases, and not misuse of the product such as allowing leakage into waterways and groundwater.

The MTBE provisions are part of a package of automobile fuel proposals that also includes a requirement to double the use of corn-based ethanol as a gasoline additive, a measure widely popular among both Republicans and Democrats.

On the issue of renewable energy use by power plants, electric utilities have lobbied aggressively against the so-called ``renewable fuels standard" which would require them to make 10 percent of their power from non-fossil, non-hydro energy. They argue that some utilities would find it hard to comply because of a shortage of renewable energy sources in some regions, leading to higher electricity costs.

The industry maintains the issue should be left to states.

Separately, Domenici and Tauzin released a revised draft Monday, covering much of the proposed bill, except for the ethanol/MTBE section, electricity transmission issues and tax issues.

The draft included measures aimed at beefing up guard forces at nuclear power plants. Guards for the first time would be authorized to use deadly force and be given access to upgraded weapons. The penalty for acts of sabotage at a nuclear power plant would be increased from \$10,000 to \$1 million.

Gasoline prices have declined sharply over the last month, dropping about 18 cents per gallon.

